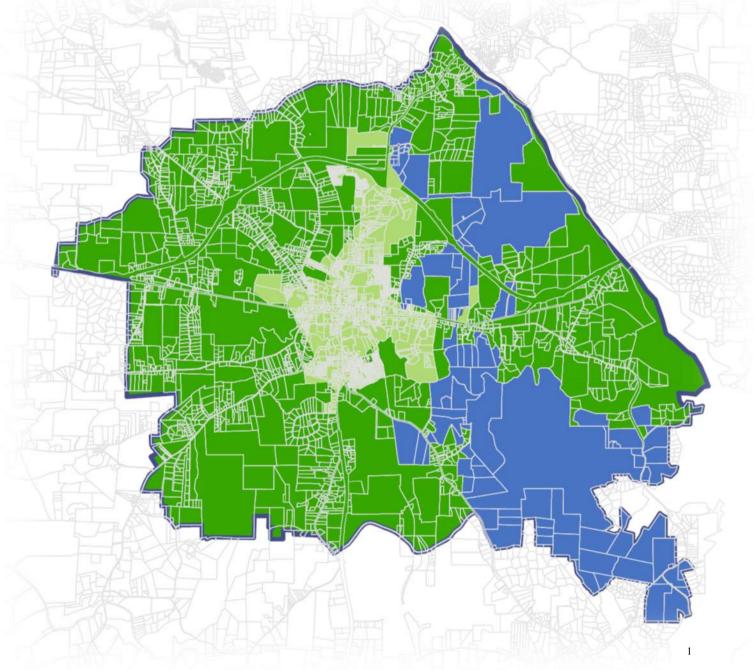


# CHATHAM PARK

ADDITIONAL ELEMENTS





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#### I. Introduction

The Chatham Park PDD Master Plan lays out the requirement for the submittal of additional information in twelve areas that will govern land use and development within the project. These twelve areas include:

Development Phasing Signage
Open Space Lighting
Tree Protection Public Art

Landscaping Affordable Housing
Stormwater Transportation
Parking and Loading Public Facilities

Each of these twelve elements are provided in this document and give more detail that will become part of the PDD Master Plan and will be used to guide the production of future small area plans, subdivision plans, and Site Plans throughout the development of Chatham Park.

#### II. Definitions and General Provisions for Additional Elements

The following defined words and terms and general provisions are applicable to and incorporated by reference in each Additional Element adopted by the Town as part of the Chatham Park Planned Development District Master Plan, except as otherwise defined in any specific Additional Element. The defined words and terms have the specified meanings, whether or not the first letter of the word is capitalized.

#### **Definitions**

- "Activity Center" means an area of land designated as an Activity Center on any Small Area Plan (as defined in the Master Plan) that has been approved by the Town. Actual boundaries of an Activity Center will be determined by survey. In accordance with the Master Plan, five Activity Centers are allowed in Chatham Park.
- "Additional Element" and "Element" mean an Additional Element adopted by the Town in accordance with the Master Plan and applicable Town ordinances. Additional Element and Element are used interchangeably.
- "Chatham Park" and "Chatham Park PDD" means the Chatham Park Planned Development District approved by the Pittsboro Board of Commissioners on August 10, 2015.
- "development plan(s)" means any or all of the following, to the extent that Town approval is required by applicable law: application(s) for permit(s); permit(s); subdivision plan(s); site plan(s); construction drawings; subdivision plat(s); street right of way and/or easement dedication plat(s); recombination plat(s) and plan(s); and other plats and plans for development in Chatham Park, including plats or plans that address requirements in one or more Additional Elements (for example, a Tree Coverage Plan, Open Space Area Plan, or Stormwater Plan). A development plan may or may not address one or more development standards established by an Additional Element, and a standard not addressed on a development plan may be addressed by a subsequent development plan. For example, sign, landscaping, and parking standards not addressed on a subdivision plat that creates one or more non-residential Lots may be addressed in subsequent development plans for the Lots established by that subdivision plat. References in an Additional Element to development plan(s) are to the applicable development plan(s).
- "Development Review Committee" or "DRC" means the Development Review Committee for Chatham Park PDD that is required to be established by the Master Plan as "the exclusive agency authorized to interact with the Town with respect to development applications in Chatham Park PDD from any person or legal entity". Pursuant to restrictive covenants for Chatham Park recorded or to be recorded, the DRC is or will be authorized to make certain decisions with respect to

development in Chatham Park, including one or more matters addressed in an Additional Element. References in an Additional Element to rights of and/or approvals by the DRC are based on the authority of the DRC pursuant to the restrictive covenants, are included solely for notice to the public and owners and users of property in Chatham Park of the authority of the DRC under the restrictive covenants, and do not delegate governmental regulatory authority to the DRC. Any approval or disapproval of any matter by the DRC may be done in the sole discretion of the DRC. Approval of any development plan or part thereof by the DRC is not binding on the Town and does not constitute approval by the Town. All development plans in Chatham Park must be approved by the Town or other applicable governmental authority.

- "governmental entity" or "governmental authority" means and includes, as applicable, the Town of Pittsboro, Chatham County, the State of North Carolina, the United States of America, and all other governmental entities and quasi-governmental entities that have jurisdiction over Chatham Park or any part thereof, and all applicable departments, divisions, sections, branches, agencies, and other subdivisions of such governmental entities.
- "Lot" ("lot") or "Parcel" ("parcel") or "Site" ("site") or "Property") ("property") means and includes any of the following: (i) a tract of real property identified on a plat recorded in the office of the Register of Deeds for Chatham County, North Carolina as a separate tract; or (ii) a separate tract described by metes and bounds or by reference to a recorded plat in a deed recorded in the office of the Register of Deeds for Chatham County, North Carolina; or (iii) a tract of real property for which a development plan has been submitted to the Town, whether or not such tract is separate from a larger tract that includes the tract subject to the development plan. A "residential Lot" is any one of the following: (i) a detached single-family residential Lot; (ii) a residential townhouse Lot; or (iii) a residential condominium unit in a building.
- "Master Plan" means the Master Plan for Chatham Park PDD. The Master Plan, including all defined words and terms therein, is incorporated by reference.
- "NCDOT" means North Carolina Department of Transportation.
- "Person" means and includes any one or more of the following: a natural person; a trust; an estate; the Town or other governmental entity or agency; or any legal entity.
- "Planning Director" means the Person employed as the Planning Director for the Town or the Person designated by the Planning Director or Town Manager to perform an action of the Planning Director.

- "Section" and "Small Area" mean the same thing and are used interchangeably.
- "site plan" means a development plan for any development in Chatham Park other than a single-family detached residential subdivision.
- "standards" and "requirements" mean the same thing and are used interchangeably.
- "subdivision plan" means a development plan for a single-family detached residential subdivision in Chatham Park.
- "Town Engineer" means the Person employed as the Town Engineer for the Town or other Person designated by the Town Engineer or Town Manager to perform an action of the Town Engineer.
- "Town Manager" means the Person employed as the Town Manager for the Town, or an Assistant Town Manager, or other Person designated by the Town, the Town Manager, or an Assistant Town Manager to perform an action of the Town Manager.
- "Town of Pittsboro" and "Town" mean the Town of Pittsboro, North Carolina and are used interchangeably.
- "Village Center" means an area of land designated as a Village Center on any Small Area Plan (as defined in the Master Plan) that has been approved by the Town. A Village Center may consist of an area of concentrated, urbanized development, or a focal point for surrounding areas of development, or other area shown on the applicable Small Area Plan. Actual boundaries of a Village Center will be determined by survey.

In addition to the foregoing, there may be other defined words and terms in one or more Additional Elements.

#### **General Provisions**

The provisions of each Element supplement, and in some instances may clarify, provisions in the Master Plan with respect to the matters addressed in that Element. If there is any conflict between any Element and the Master Plan, the terms of the Element control. Any Element may be supplemented and clarified by the "Development Agreement" for Chatham Park referenced in the Master Plan. The Master Plan, together with the Elements, constitute the Town's development regulations for Chatham Park. Each Additional Element adopted by the Town becomes a part of the Master Plan and will be enforceable in the same manner and to the same extent as the Master Plan. Development in Chatham Park that complies with the Master Plan and the standards contained in the Additional Elements adopted by the Town shall, as a matter of law, be deemed to be consistent and conforming with any subsequently adopted

ordinance of the Town including, but not limited to any Unified Development Ordinance.

Any Element may be amended in the same manner as amendment to the text of the Town of Pittsboro Zoning Ordinance (or the text of any Unified Development Ordinance subsequently adopted by the Town that includes zoning).

Any photographs that appear in any Element are illustrative only and are not intended to limit or exclude other examples that comply with the requirements of that Element.

For purposes of the Additional Elements, an accessory use associated with a residential development shall be classified a residential use and an accessory use associated with a non-residential development shall be classified a non-residential use.

In the event that any part or all of any term, requirement, standard, exception, exclusion, provision or section of any Element shall be adjudged invalid or unenforceable by a court of competent and final jurisdiction, the same shall be severable from the remainder of that Element and that Element shall not be deemed void or voidable, but shall continue in full force and effect. If any such term, requirements, standard, exception, exclusion, provision or section of any Element is adjudged invalid due to its scope or breadth, such item shall be deemed valid to the extent of the scope or breadth permitted by law.

An Element is not applicable to development plans submitted to the Town prior to the Town's approval of that Element (the "Approval"), except as follows: The owner of any Lot for which a development plan has been submitted to the town prior to the Approval may elect to make the Lot subject to that Element by giving written notice to the Town Manager or Planning Director of such election on or before the later of the following dates: (i) date of approval of the applicable development plan; or (ii) not later than sixty (60) days following the date of Approval of the applicable Element. If such election is made, the Element shall apply to such Lot from and after the date of the election notice, but such election shall not render nonconforming in any respect, restrict, or adversely affect in any manner development on the Lot commenced or completed prior to the date of the election notice.

Any land on which development is prohibited, restricted, or limited in order to satisfy avoidance, minimization, compensation, and other regulatory requirements applicable to Chatham Park pursuant to Sections 404 and 401 of the United States Clean Water Act or any other United States, State of North Carolina, or other governmental entity regulatory requirements, also may be used to satisfy other requirements of the Master Plan, any Additional Element, or any other governmental entity regulatory requirement applicable to Chatham Park, including, without limitation, the use of the same land as Qualifying Open Space for Chatham Park under the Master Plan and Master Open Space Plan Additional Element. Any land that is used as Qualifying Open Space for Chatham Park also may be used to satisfy avoidance, minimization, compensation, and other regulatory requirements of Sections 404 and 401 of the United States Clean Water Act and any other United States, State of North Carolina, or other governmental entity regulatory requirement. It is the specific intent of this paragraph that the same land used to

satisfy any one governmental entity regulatory requirement also may be used to satisfy any one (1) or more other governmental entity regulatory requirements.

An "Administrative Alternative" is a proposal that includes a modification of a specific requirement or standard set forth in an Additional Element. Whether or not an Administrative Alternative is specifically addressed in an Additional Element, an Administrative Alternative may be approved by the Planning Director if the Planning Director determines that it meets one of the following criteria:

- If specific requirements for approval of a particular Administrative Alternative are stated in the applicable Element, the proposed Administrative Alternative complies with those requirements.
- If specific requirements for approval of a particular Administrative Alternative are not stated in the applicable Element, the proposed Administrative Alternative satisfies the purpose and intent of the requirement or standard to which it relates.

The Planning Director may approve the requested alternative, approve the requested alternative with specified conditions, or deny the requested alternative, and shall issue the decision in writing to the applicant within thirty (30) days following receipt of the request. Within thirty (30) days of receipt of notice of the decision of the Planning Director, the applicant may file an appeal of the decision of the Planning Director with the Town's Board of Adjustment in accordance with Town ordinances for appeal of matters to the Town's Board of Adjustment. An approval or approval with conditions of an Administrative Alternative that is accepted by the applicant becomes the applicable requirement or standard for the purpose requested. For purposes of approval of an Administrative Alternative, any reference to Planning Director includes any assistant Planning Director or any other person designated by the Town Manager to have authority to approve an Administrative Alternative.

Chatham Park Investors LLC, or its successor, assignee, or designated representative, shall meet with the Pittsboro Board of Commissioners periodically (annually or at such other, longer intervals as determined by the Pittsboro Board of Commissioners from time to time) to review the Additional Elements and to discuss possible revisions to improve the Additional Elements or the way in which they are applied to development in Chatham Park.

#### 1. Development Phasing Element

#### Section 1. Purpose

The infrastructure needed to serve Chatham Park at build-out is substantially more than will be needed to serve the development expected in the early phases of the project. As a result, the provision of infrastructure and facilities will occur as the development they serve takes place. Since Chatham Park development will occur incrementally, this Element provides a framework and threshold for providing the infrastructure necessary to serve development as it occurs. More details regarding necessary public infrastructure are provided in the Master Public Facilities Plan Additional Element and the Master Transit Plan Additional Element.

The primary purpose of this Element is to assist the Town of Pittsboro and Chatham Park in the planning and provisions of the extension of municipal services to Chatham Park and other parts of the Town. The provision of public facilities in an orderly fashion is an important consideration in protecting and safeguarding the health, safety and well-being of Pittsboro and Chatham County residents. The Town can use this Element as one of the tools to develop its own Comprehensive Plan that guides the provision of transportation improvements, water, sewer, fire and police protection, parks and recreation facilities, refuse collection and other municipal services.

#### Section 2. Phases

Full build-out of Chatham Park is anticipated to take approximately 35-40 years to the year 2055. Phase 1 of development will begin in the North Village (see Figure 1) and occur over the next 15 years. Phase 2 of the project will be, for the most part, non-residential or mixed use development and will generally be located along what will be the southern extension of Chatham Park Way from US 64 Business to US 15-501 south of Pittsboro. This roadway will serve as a temporary bypass around downtown Pittsboro helping mitigate traffic congestion until the permanent bypass is completed around the west side of Town.

Phases 3, 4, 5, and 6 are projected to develop sequentially moving from northwest to southeast, however, it is possible some residential neighborhoods located in Phase 3 would develop concurrently with Phase 2's non-residential development.

Actual phasing of development, including the configuration of development phases, may vary from the foregoing anticipated phasing, and will depend upon such factors as market conditions, economic considerations, and completion of infrastructure construction.

Additional details of Chatham Park's phasing plans will be described in Small Area Plans. These Small Area Plans will provide an analysis of the estimated annual development and its impacts on the Town, included projected Town revenues from the development. Additionally, the Development Agreement for Chatham Park will include a schedule for phasing of development in Chatham Park and will provide for periodic compliance review by the Town Manager to verify good faith compliance with the terms of the Development Agreement.

The Chatham Park PDD Development Review Process for Subdivisions and Site Plans is described in the flow chart attached as an Appendix to this Element.

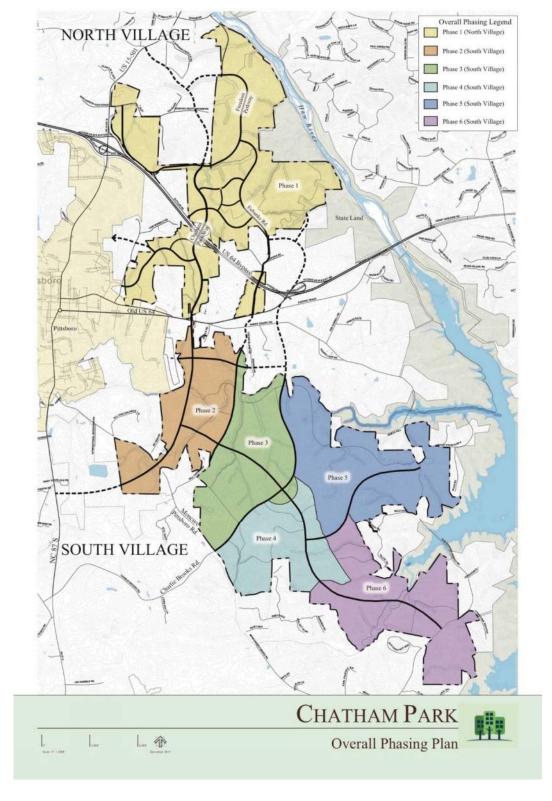
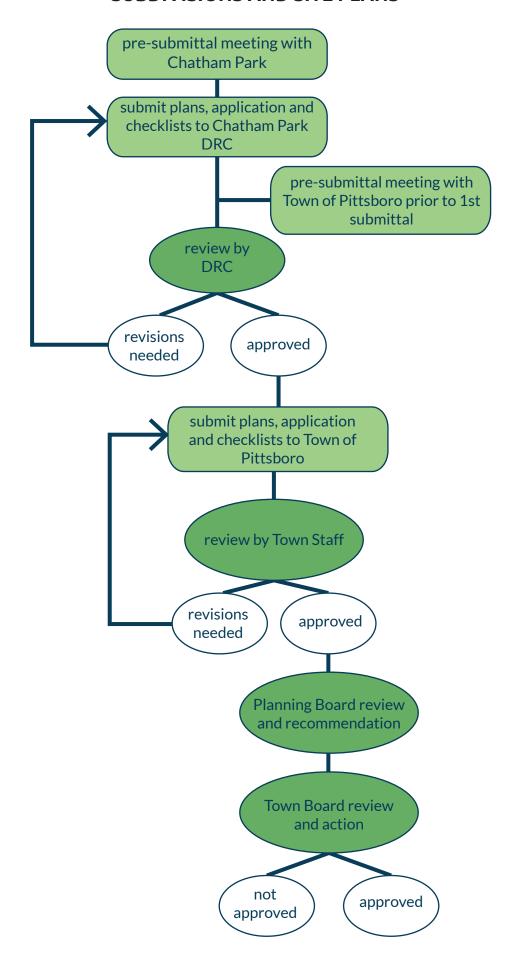


FIGURE 1

## DEVELOPMENT REVIEW PROCESS: SUBDIVISIONS AND SITE PLANS



#### Section 3. Objectives

This Element is based on general objectives which apply to the Town's and Chatham Park's planning efforts as a whole and specific functional program areas in particular. These objectives therefore should be viewed as the key principles for establishing an infrastructure network which is responsive to community expectations; the public health, safety, and general welfare; and development impacts.

#### Objective 1:

Locate new infrastructure that serves the greatest number of people.

- 1. Locate infrastructure appropriately in the area it is intended to serve.
- 2. Working in concert with the Town, program the extension of public infrastructure that meets public health or safety needs or required service levels.

#### Objective 2:

Balance the provision of public infrastructure with growth and development.

- 1. Determine the extension of public infrastructure in size and quantity which is consistent with the projected development phasing in Chatham Park.
- 2. Ensure that the extension of adequate public infrastructure is available, programmed in the Town's Capital Improvement Plan, or provided by new development, before increasing planned intensities.

#### Objective 3:

Mitigate the impact of the extension of public infrastructure on adjacent planned and existing land uses.

- 1. Locate the extension of public infrastructure in a manner that promotes and enhances the community character.
- 2. Provide for public infrastructure that is properly designed, constructed, screened and buffered in order to mitigate visual impact on adjacent planned development of a different use or nature.

#### Objective 4:

As part of Chatham Park Small Area Plan submittals, provide an estimate of the annual increase in the number of dwelling units, non-residential gross square footage, and population in Chatham Park to assist the Town in planning future public facilities.

- 1. Provide proposed phasing plans with the submittal of Small Area Plans in order to provide an accurate estimate of dwelling units and non-residential gross square footage built on an annual basis in Chatham Park.
- 2. Provide a timeline of when public facilities identified in the Master Public Facilities Plan Additional Element should be provided based on the population projections established in the Small Area Plan.
- 3. Work with the Town of Pittsboro and Chatham County to determine who provides particular public facilities, when and where they are provided and, if identified as Chatham Park's responsibility, how reimbursement is to occur for the cost of public facilities constructed or installed by the developer of Chatham Park.

#### For the purposes of this Element:

- the term "public infrastructure" includes improvements and facilities for any or all of the following: streets; water supply and distribution; wastewater collection and treatment; stormwater (to the extent owned or operated by the Town or other governmental entity); police protection; fire protection; schools (which, at the time of the approval of this Element by the Town are provided by Chatham County); parks and recreation; refuse and recycling collection and disposal; government administration offices and other facilities; and other services that may be provided by the Town; and
- the term "infrastructure" includes public infrastructure and improvements and facilities for any or of the following: electricity; telephone (of all types); natural gas; television; high speed internet; stormwater; private parks and recreation; and other services provided by private parties to individuals and businesses in Chatham Park.

#### 2. Open Space Element

#### Section 1. Purpose

The general purposes of the Master Open Space Plan Additional Element (also referred to as "Open Space Element" or "Element") are to: preserve Open Space, sensitive natural areas, and riparian corridors; protect and enhance wildlife habitat; and protect water quality, by pursuing the following objectives where appropriate (listed in order of priority):

- 1. To preserve Open Space, including areas containing unique and sensitive natural features such as steeper slopes, streams, flood plains and wetlands, by protecting them from the direct effects of development, specifically buildings and intensive active recreational uses within these areas;
- 2. To create new woodlands through natural succession and reforestation where appropriate, and to encourage the preservation and improvement of habitat for various forms of wildlife;
- 3. To establish new Open Space areas as development occurs in close proximity to residences, offices, and retail sites;
- 4. To provide greater design flexibility and efficiency in the siting of services and infrastructure, in order to achieve a reduction in the amount of roads, utilities and impervious material required for residential development;
- 5. To create compact neighborhoods with direct visual access to open land, with amenities in the form of neighborhood Open Space, and with a strong neighborhood identity; and
- 6. To reduce erosion and sedimentation by the retention or addition, to the extent reasonably practicable, of vegetation within Open Space; and

#### Section 2. Open Space

#### Open Space Provided

The Master Plan requires Open Space to be provided at a ratio of  $1/100^{th}$  of an acre per dwelling unit and  $1/20^{th}$  of an acre per 1000 gross square feet ("GSF") of non-residential building floor area. Based on the foregoing ratios, 1,320 acres of Open Space will be required in Chatham Park PDD if the maximum number of dwelling units and maximum GSF allowed

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<sup>&</sup>lt;sup>1</sup> Building floor area is the sum in square feet of the gross horizontal area of all floors of a building measured from the exterior walls or from the centerline of a common wall when 2 buildings or units abut. Gross floor area includes basement floor area when more than 50% of the basement height is above the established curb level or above the finished lot grade level where the curb level has not been established. Elevator shafts, stairwells, floor space used for mechanical equipment, attics, balconies and mezzanines, enclosed porches and floor area devoted to accessory uses are included in the calculation of gross floor area. However, the following shall not be included: any space devoted exclusively to on-site parking; outdoor loading, display, storage, and utility service areas; uninhabited enclosed space on tops of roofs; and attic space having head room of less than 7'-10".

by the Master Plan are constructed. However, the Master Plan requires at least 1,320 acres of Open Space in Chatham Park PDD, whether or not the maximum number of dwelling units and maximum GSF are constructed, and that 1,320 acres is referred to in this Element as "Required Open Space". Open Space provided in addition to the Required Open Space is referred to in this Element as "Additional Open Space". As provided in the Master Plan, Open Space is land that is protected from development, specifically buildings, and where intensive active recreation uses are not allowed. Open Space may be kept in its natural state but also can be used for greenways and some non-intensive recreational uses. Utility easements and associated facilities (excluding, for example, easements for overhead electric transmission lines existing on the date of approval of this Element by the Town Board of Commissioners), stormwater drainage easements, and stormwater facilities may be located in Open Space. Uses allowed in Open Space that consists of riparian buffers are allowed as provided herein.

As used in this Element, and notwithstanding any other approved definition of such term, the term "development plan" shall refer to a site plan or a residential subdivision plan. Each new development plan submitted for approval by the Town shall either (i) identify any new Open Space to be established by that development plan, or (ii) identify Open Space previously established on a development plan approved by the Town that satisfies the Required Open Space requirements for the property on that development plan, or (iii) identify Open Space for the property subject to the development plan that is to be shown on a subsequent development plan, or (iv) indicate that a payment-in-lieu, if allowed by the Town Board, will be made for any Required Open Space that otherwise would be required for the property on that development plan. If any new Required Open Space is identified on a new development plan, the total acreage of Required Open Space previously provided (either by land or payment-in-lieu) and the total acreage of new Required Open Space proposed shall be shown thereon. Required Open Space for property included in a development plan is not required to be located in the same Small Area in which the property on that development plan is located. Notwithstanding anything to the contrary in this Element, Open Space on a residential Lot<sup>2</sup> may not constitute any of the Required Open Space.

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<sup>&</sup>lt;sup>2</sup> A "residential Lot" is any one of the following: (i) a detached single-family residential Lot; (ii) a residential townhouse Lot; or (iii) a residential condominium unit.

#### Qualifying Open Space

All of the land areas in Chatham Park described in the following subsections A through E, and any other land areas allowed by the Town Board of Commissioners, may qualify as Required Open Space. Any of those land areas, regardless of whether they meet any applicable dimensional requirements, also may qualify as Additional Open Space. Other land areas in Chatham Park that are not built upon also may qualify as Additional Open Space. In addition to any requirements specified in subsections A through D, to qualify as Required Open Space, each of the areas listed in A through D must meet all of the following requirements, except as otherwise allowed by the Town Board of Commissioners:

- 1. Be not less than one (1) acre in size;
- 2. Average not less than fifty feet (50') in width, with no portion of the area being less than twenty-five feet (25') in width; and
- 3. Not more than thirty percent (30%) of the area may be less than thirty-five feet (35') in width.

Provided, however, and notwithstanding the foregoing, if a greenway, greenway easement, or utility easement (but excluding easements for overhead electric transmission lines existing on the date of approval of this Element by the Town Board of Commissioners) is located or partially located in any area described in subsections A through D, the entire width of the area shall be included in determining the width of the area for all width requirements of this Element, notwithstanding that the area or a portion thereof is divided by the greenway, greenway easement, or utility easement. For example: a 30 foot (30') wide greenway easement is located in the outer fifty feet (50') of a one hundred foot (100') wide riparian buffer, the portion of the riparian buffer on one side of the utility easement is sixty feet (60') wide and the portion of the riparian buffer on the other side of the greenway easement is ten feet (10') wide. The entire one hundred feet (100') width of the riparian buffer is the width of that riparian buffer for all width requirements of this Element.

#### A. Riparian Buffer:

A substantial amount of the Open Space in Chatham Park will be located in riparian buffers. The following are the riparian buffers provided in Chatham Park: (i) a regulated buffer, which is a 50 foot wide strip of land adjoining the top of each bank of those perennial streams and intermittent streams described in the Master Plan approved by the Town on August 10, 2015, and a 50 foot wide strip of land adjoining the top of the western bank of Haw River at Sections 1.1 and 1.5 as those Sections are shown on the Master Plan; and (ii) an additional buffer, which is any buffer required by this Element that adjoins a regulated buffer required by this Element.

Additional buffers in Chatham Park required by this Element are: (i) a 50' wide additional buffer adjoining the regulated buffer on all perennial streams (50' regulated buffer + 50' additional buffer = total buffer width of 100' adjoining the top of each bank of perennial streams); (ii) a 250' wide Haw River Buffer adjoining the regulated buffer on the western bank

of the Haw River at Section 1.1 in the Master Plan (50' regulated buffer + 250' additional buffer = total buffer width of 300' adjoining the top of the western bank of Haw River); (iii) a 950' wide Haw River Buffer adjoining the regulated buffer at Section 1.5 in the Master Plan (50' regulated buffer + 950' Haw River Buffer = total buffer width of 1,000' adjoining the top of the western bank of Haw River); and (iv) a 50' wide EIS Tract 1 Buffer which adjoins the regulated buffer on those intermittent streams that are located in that portion of Chatham Park that is designated as Tract 1 in the February 4, 2010 document entitled "Environmental Impact Statement Proposed Wastewater Treatment Plant And Discharges Into Robeson Creek And The Haw River" and that drains to the unimpounded section of the Haw River (50' regulated buffer + 50 foot additional buffer = total buffer width of 100' adjoining the top of each bank of these intermittent streams). The EIS Tract 1 Buffer is depicted on **Appendix "C"** attached to and incorporated in this Element.

All uses in a regulated buffer shall be governed by the Town of Pittsboro's "Riparian Buffer Protection Ordinance" ("RBPO") and this Element if located in Open Space that consists of a regulated buffer. A copy of the RBPO as it exists as of its adoption date of February 14, 2011 is attached as **Appendix "A"** and incorporated in this Element. All uses in an additional buffer shall be governed by this Element, including the table of uses attached to and incorporated in this Element as **Appendix "B"** and by RBPO Sections 7(A)(7), 7(B)-(C), 8(A)(1)-(2) and (4), 9(A)-(B), 10(A)-(B), (D)-(E), 11, 14(A)-(K), (O)-(W) which are hereby incorporated in this Element. With respect to additional buffers, references to the "Ordinance" and to sections of the Ordinance in the incorporated sections of the RBPO shall be deemed to refer to this Element and to applicable Sections of this Element. Any use not listed in the RBPO or not listed in Appendix "B" shall be treated the same as the use in the RBPO or in Appendix "B", respectively, that most closely approximates such unlisted use. The definition of riparian buffers in this Element supersedes definitions in the Master Plan.

The acreage in any street right of way located within a Required Open Space area shall be excluded in determining the acreage of that Required Open Space area, except that any median located in that street right of way that meets the requirements of this Element for Required Open Space shall be included in the determination of the acreage of that Required Open Space.

#### **B.** Core Conservation Areas

#### 1. Park Connection- North Village

Park land of approximately 110 acres in size will be provided in Section 1.5 as shown on the Master Plan. It will serve as a connector between two large, state owned, tracts of land along the Haw River. This connection results in approximately 450 contiguous acres of conserved land. Further detail regarding this connector will be provided as part of the North Village Small Area Plan submittal and associated site and subdivision plans.

Staff removed the Riparian Buffer Protection Ordinance (RBPO) from this document to keep it shorter and more user-friendly. You can find the RBPO on the Town's website <a href="here">here</a>.

#### 2. Robeson Creek Linear Park and Open Space- South Village

The Chatham Park Master Plan requires an additional 50 foot wide strip of Open Space adjacent to the 100 foot wide riparian buffer on each side of those portions of Robeson Creek that are located in Chatham Park. In addition to the foregoing, another 150 feet of Open Space and/or park land will be provided along the south side of Robeson Creek in Chatham Park resulting in a 300 foot wide protected area of land on the south side of Robeson Creek in Chatham Park. The foregoing area, together with adjacent land along Robeson Creek that will be protected by riparian buffers and land owned by the United States of America, will result in approximately 300 acres of contiguous protected lands. Further detail of this approximately 300 foot wide land area will be provided as part of Small Area Plan submittals and associated site and subdivision plans.

#### 3. Jordan Lake Nature Area – South Village

Located in the far south east corner of Chatham Park, approximately 250 acres of Open Space and/or park land will be reserved in Chatham Park. This land area is located between Gum Springs Church Road and Jordan Lake. Further detail of this approximately 250 acres will be provided as part of Small Area Plan submittals and associated site and subdivision plans.

## C. Natural Areas, Wetlands, Water Bodies, 100 Year Flood Plains, and Areas of Steeper Slopes

- 1. Natural Areas: Undeveloped and undisturbed areas as shown on development plans.
- 2. Wetlands: Wetlands are areas that interface between land and water and are characterized by having hydric soils, hydrophytic plants and wetland hydrology. All wetland areas that are determined to be jurisdictional by the U.S. Army Corps of Engineers will be protected in Chatham Park, except as otherwise allowed by the U.S. Army Corps of Engineers.
- 3. <u>Water Bodies:</u> All lakes, ponds and other bodies of water located in Chatham Park and considered jurisdictional by the NC Department of Environmental Quality and the U.S. Army Corps of Engineers will be protected in Chatham Park.
- 4. <u>100 year Flood Plains:</u> 100 year flood plains are land areas with a 1% annual chance of flooding as determined by the Federal Emergency Management Agency. All 100 year flood plain areas in Chatham Park are protected from development as determined by the approved Master Plan.
- 5. <u>Steeper Slopes:</u> Areas of steeper slopes exceeding 20% have been identified in the Master Plan and many of these areas, particularly when located in areas adjacent to riparian buffers, will be protected from development.

#### D. Areas Not Built Upon and Designated on a Development Plan as Open Space

- 1. <u>Tree Coverage Areas</u> (TCA), as defined in the Tree Protection Plan Additional Element, located outside of riparian buffers.
- 2. <u>Streetscape Buffers</u> with an average width of not less than 50 feet. Planting standards are provided in the Landscaping Element and more detail will be included in Small Area Plans and development plans.
- 3. <u>Perimeter Buffers and Perimeter Boundary Transitions</u> as defined in the Landscaping Element, with an average width of not less than 50 feet.
- 4. <u>Stormwater Control Measures (also referred to as "BMPs")</u> as prescribed in the Stormwater Additional Element, where the BMP is treated as an Open Space amenity that supports passive recreation uses by providing pedestrian elements such as paths and benches.

#### 5. <u>Usable Open Space</u>

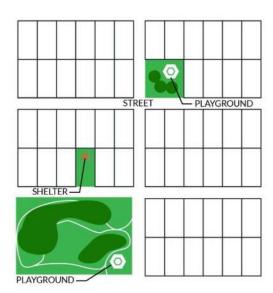
For the purposes of this Element, usable Open Space shall mean an area that:

- a. is not encumbered with any substantial structure;
- b. is left in its natural or undisturbed state if wooded, except for the construction of greenways or trails and public utilities.
- c. is capable of being used for passive recreation, such as walking or jogging; and,
- d. is legally and practicably accessible for the intended users.

#### E. Small Scale Urban and Suburban Open Spaces and Parks.

One or more examples of the following items 1 through 9 are shown immediately following explanation of the item A maximum of twenty percent (20%) of the Required Open Space (264 acres of the 1,320 acres of Required Open Space) may consist of the areas described in 1 through 9.

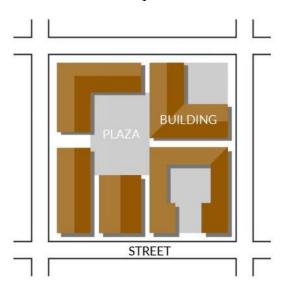
- 1. <u>Playground (Private)</u>, which may be developed within a square or may stand alone. All playgrounds:
  - a. shall be equipped with an open shelter or benches as appropriate for the proposed development;
  - b. may be covered in turf, sand, mulch, gravel or other approved material as appropriate for the proposed development;
  - c. shall be landscaped as appropriate for the proposed development; and
  - d. generally will be between 2,500 square feet and 15,000 square feet in area.



#### 2. Plaza

#### All plazas:

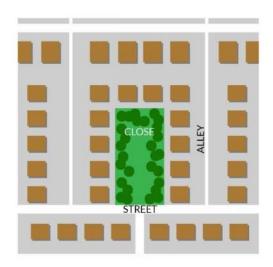
- a. shall be located adjacent to or as a part of an office, civic or retail building or common area facility developed as a project amenity;
- b. shall provide hardscape and landscape material as appropriate within the context of their setting;
- c. shall maintain surface areas at a slope of less than 5%. Surface areas may be stepped, in a manner approved as being appropriate and necessary to accommodate natural topography;
- d. shall not exceed in horizontal length or width more than three times the average height of adjacent buildings; and
- e. generally will be between 2,000 square feet and 30,000 square feet in area.



#### 3. Close

#### All closes:

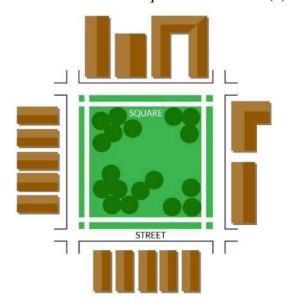
- a. shall be landscaped as appropriate within the context of its setting; and
- b. generally, will be between 2,500 square and 10,000 square feet in area.



#### 4. Square

#### All squares:

- a. may be surfaced in any combination of turf, crushed gravel, brick pavers, or other suitable approved ground cover.
- b. shall be landscaped as appropriate within the context of its setting; and
- c. generally will be between 200 square feet and one (1) acre in area.



#### 5. Parkway

#### All parkways:

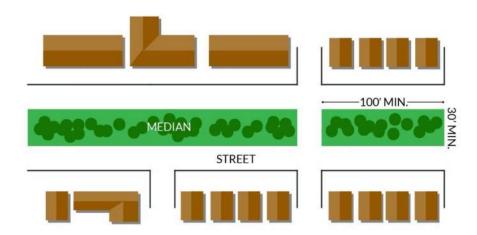
- a. shall retain, to the greatest extent possible, natural or pre-existing contours, topography, water courses and vegetation;
- b. shall be landscaped as appropriate within the context of their setting; and
- c. generally will be a minimum of one half (1/2) acre in area and shall have an average width of not less than fifty (50) feet from back of curb/edge of pavement to back of curb/edge of pavement.



#### 6. Medians

#### All medians:

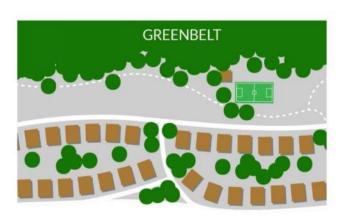
- a. shall retain, to the greatest extent possible, natural contours and vegetation;
- b. if sparsely vegetated, shall be enhanced with supplemental landscaping; and
- c. shall average not less than thirty (30) feet in width and be not less than one hundred (100) feet in length



7. <u>Greenbelt</u>. A "greenbelt" is an area of largely undeveloped, wild, or agricultural land surrounding urban areas.

All greenbelts:

- a. shall be maintained to the greatest extent reasonably practicable, in their natural, undeveloped state or may be enhanced with landscape materials to provide a landscape buffer in compliance with the regulation of the Landscape Element for a Type C buffer.
- b. may include within the greenbelt a sidewalk, footpath, walkway, greenway, or multi-use trail, provided that such are located not less than twenty (20) feet from the outer perimeter of the greenbelt, except where connections are made to adjoining sites;
- c. may include areas of minor disturbance for maintenance, public or private utilities, public or private access, or amenity construction;
- d. shall average not less than fifty (50) feet in width.



#### 8. <u>Mini-Parks (Private):</u>

The purpose of the mini-park is to provide active recreational facilities to serve the residents of the immediate surrounding neighborhood or subdivision but are private and not part of the Towns recreation system. The following are illustrative of the types of facilities which shall be deemed to serve active recreational needs of the residents of the immediate surrounding neighborhood or subdivision and also count toward satisfaction of Open Space requirements of the PDD: tennis courts; swimming pools; basketball courts; slides; tot lots; playground; and associated parking. Each mini-park:

- shall be landscaped and provided with sufficient natural or manmade screening for buffer to minimize negative impacts on adjacent residences.
- ii. shall be centrally located, easily accessible, so as to be conveniently and safely reached and used by those persons the mini-park is designed to serve.
- iii. shall be constructed on land that is relatively flat, either before or after grading.
- iv. generally will be between 5,000 square feet and 5 acres in area.

#### 9. Outdoor Urban Amenities.

All outdoor urban amenities:

- a. shall not be less than 200 square feet in area; and
- b. shall have at least one direct access to a principal building or to a street, bikeway, or walkway accessible to the public or to the occupants or users of the principal building.

#### Dedication and Maintenance of Open Space

Open Space shown on a recorded plat that meets the requirements of this Element to qualify as Required Open Space and that is designated on the plat as Required Open Space shall constitute Required Open Space under this Element. Any such Open Space shown on a recorded plat that does not qualify as Required Open Space under this Element or that qualifies as Required Open Space but is not designated as Required Open Space on the plat, shall constitute Additional Open Space. Provided, however, and notwithstanding the foregoing, Open Space shown on plats of land in Chatham Park that are recorded prior to the adoption of this Element by the Town and that meet the requirements of this Element for Required Open Space, shall constitute Required Open Space under this Element if designated as Open Space on the applicable recorded plat.

#### Payment-in-Lieu

Payments-in-lieu of Open Space may be made as approved by the Town Board.

#### **APPENDIX "B"**

#### TABLE OF USES IN ADDITIONAL BUFFERS

NOTE: Uses in additional buffers are subject to this Appendix B Table. For the purposes of this Appendix B Table, a "perpendicular crossing" is a crossing that intersects the surface water at an angle between 75 degrees and 105 degrees. "Zone One" and "Zone Two" as referred to in this Appendix B Table of Uses, are defined in the RBPO. To distinguish from Zone One and Zone Two, additional buffers are referred to as "Zone Three.".

Use	Exempt*	Allowable*
Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities, provided that the width of access trails does not exceed the minimum width practicable.	X	
Airport facilities:		
• Airport facilities that impact equal to or less than 150 linear feet or one-third of an acre of riparian buffer per 50 feet of riparian buffer width (e.g., one-third acre for a 50 foot riparian buffer, two-thirds acre for a 100 foot riparian buffer, etc.).	X	
• Airport facilities that impact greater than 150 linear feet or one-third of an acre of riparian buffer per 50 feet of riparian buffer width (e.g., one-third acre for a 50 foot riparian buffer, two-thirds acre for a 100 foot riparian buffer, etc.).		X
• Activities necessary to comply with FAA requirements (e.g. radar uses or landing strips).		X
Archaeological Activities	X	
Bridges		X
Canoe Access, provided that installation and use do not result in removal of trees as defined in the RBPO and no impervious surface is added to the buffer.	X	
Dam maintenance activities:		
<ul> <li>Dam maintenance activities that do not cause additional buffer disturbance beyond the footprint of the existing dam or those covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3 ("NWP 3").</li> <li>Dam maintenance activities that do cause additional buffer disturbance beyond the footprint of the existing dam or those not covered under NWP 3.</li> </ul>	X	X

<sup>\*</sup>To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in the "Requirements for Categories of Uses" at the end of this Appendix B Table.

Use	Exempt*	Allowable*
Drainage ditches, roadside ditches and stormwater conveyances:     New stormwater flows to existing drainage ditches, roadside ditches, and stormwater conveyances provided		
flows do not alter or result in the need to alter the conveyance and are managed to minimize the sediment, nutrients and other pollution that convey to waterbodies.  • Realignment of existing roadside drainage ditches	X	
retaining the design dimensions, provided that no additional travel lanes are added and the minimum required roadway typical section is used based on traffic and safety considerations.  • New or altered drainage ditches, roadside ditches and	X	
stormwater outfalls provided that a stormwater management facility is installed to control nutrients and attenuate flow before the conveyance discharges through the riparian buffer.	X	
<ul> <li>New drainage ditches, roadside ditches and stormwater conveyances applicable to linear projects that do not provide a stormwater management facility due to topography constraints provided that other practicable BMPs are employed.</li> </ul>		X
Driveway crossings of stream and other surface waters, provided that, to the extent practicable, no crossings are wider than the associated crossings in Zone One or Zone Two.	X	
Driveway impacts other than crossing of a stream or other surface waters.		X
Fences:  • Fences provided that disturbance is minimized and installation does not result in removal of trees as defined in the RBPO.	X	
<ul> <li>Fences provided that disturbance is minimized and installation results in removal of trees as defined in the RBPO.</li> </ul>		X
Fertilizer application: one-time application to establish Vegetation.	X	
Grading and revegetation, provided that disturbed areas are stabilized until they are revegetated.	X	

<sup>\*</sup>To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in the "Requirements for Categories of Uses" at the end of this Appendix B Table.

Use	Exempt*	Allowable*
Greenway / hiking trails designed, constructed and maintained to maximize nutrient removal and erosion protection, minimize adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practical.	X	
Historic preservation	X	
Maintenance access on modified natural streams: a grassed travel way on one side of the water body when less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading.		X
Mining activities:		
Wastewater or mining dewatering wells with approved NPDES permit.	X	
Other mining activities.		X
Playground equipment:		
Playground equipment on single family lots provided that installation and use does not result in removal of vegetation.	X	
Playground equipment installed on lands other than single family lots or that requires removal of vegetation.		X
Ponds created by impounding streams and not used as stormwater BMPs.		X
Protection of existing structures, facilities and stream banks when this requires additional disturbance of the riparian buffer or the stream channel.		X
Railroad impacts other than crossings of streams and other surface waters subject to the RBPO.		X
Railroad crossings of streams and other surface waters subject to the RBPO, provided that, to the extent practicable, no crossings are wider than the associated crossings in Zone One and Zone Two.	X	

<sup>\*</sup>To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in the "Requirements for Categories of Uses" at the end of this Appendix B Table.

Use	Exempt*	Allowable*
Recreational and accessory structures:		
<ul> <li>Sheds and gazebos, provided they are not prohibited under local water supply ordinance:</li> </ul>		
<ul> <li>Total footprint less than or equal to 300 square feet per lot.</li> </ul>	X	
<ul> <li>Total footprint greater than 300 square feet per lot.</li> </ul>		X
Wooden slatted decks and associated steps:		
<ul> <li>Deck at least eight feet in height and no vegetation removed.</li> </ul>	X	
<ul> <li>Deck less than eight feet in height or vegetation removed.</li> </ul>		X
Removal of previous fill or debris provided that diffuse flow is maintained and vegetation is restored.	X	
Road impacts other than crossings of streams and other surface waters subject to the RBPO.		X
Road crossings of streams and other surface waters subject to the RBPO provided that, to the extent practicable, no crossings are wider than the associated crossings in Zone One and Zone Two.	X	
Road relocation: Relocation of existing private access roads associated with public road projects where necessary for public safety.		X
Stormwater BMPs: Wet detention, bioretention, constructed wetlands, and other stormwater control measures allowed by the Chatham Park Master Stormwater Manual Additional Element.	X	
Scientific studies and stream gauging.	X	
Streambank or shoreline stabilization.		X
Temporary roads, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. At the end of five years the restored buffer shall comply with the restoration criteria in Section 9.(c)(7) of the RBPO.	X	

<sup>\*</sup>To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in the "Requirements for Categories of Uses" at the end of this Appendix B Table.

Use	Exempt*	Allowable*
Temporary sediment and erosion control devices, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season provided ground cover is established within timeframes required by the Sedimentation Pollution Control Act. At the end of five years the restored buffer shall comply with the restoration criteria in Section 9.(c)(7) of the RBPO.	X	
<ul> <li>Utility, electric, aerial, perpendicular crossings of streams and other surface waters subject to the RBPO:</li> <li>Disturb equal to or less than 150 linear feet of riparian buffer.</li> <li>Disturb greater than 150 linear feet of riparian buffer.</li> </ul>	X	X
Utility, electric, aerial, other than perpendicular crossings.		X
Utility, electric, underground, perpendicular crossings, provided that, to the extent practicable, no crossings are wider than the associated crossings in Zone One and Zone Two.	X	
Utility, electric, underground, other than perpendicular crossings.	X	•
Utility, non-electric, perpendicular crossings of streams and other surface waters subject to the RBPO, provided that, to the extent practicable, no crossings are wider than the associated crossings in Zone One and Zone Two and provided that associated maintenance corridors not exceed 20 feet in width.	X	
Utility, non-electric, other than perpendicular crossings.  • Water, sewer & reclaimed water infrastructure  • All other non-electric infrastructure	X	X
Vegetation management:  • Emergency fire control measures provided that topography is restored.	X	
<ul> <li>Mowing or harvesting of plant products.</li> </ul>	X	
<ul> <li>Planting vegetation to enhance the riparian buffer.</li> </ul>	X	
<ul> <li>Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised.</li> <li>Removal of individual trees that are in danger of causing</li> </ul>	X	
<ul> <li>damage to dwellings, other structures or human life, or are imminently endangering stability the streambank.</li> <li>Removal of individual trees which are dead, diseased or</li> </ul>	X	
damaged.	X	
<ul> <li>Removal of poison ivy.</li> </ul>	X	
• Removal of invasive exotic vegetation as defined in: Smith, Cherri L. 1998. Exotic Plant Guidelines. Dept. of Environment and Natural Resources. Division of Parks and Recreation. Raleigh, N.C. Guideline #30	X	

<sup>\*</sup>To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in the "Requirements for Categories of Uses" at the end of this Appendix B Table.

Use	Exempt*	Allowable*
Vehicular access roads leading to water-dependent structures as defined in 15A NCAC 02B .0202, provided they do not cross the surface <i>water</i> and have minimum practicable width not exceeding ten feet.		Х
Water dependent structures as defined in 15A NCAC 02B .0202 where installation and use result in disturbance to riparian buffers.		X
Water supply reservoirs.		X
Water Wells:		
Single family residential water wells.	X	
All other water wells.	X	
Wetland, stream and buffer restoration that results in impacts to the riparian buffers:		
<ul> <li>Wetland, stream and buffer restoration that requires NC Division of Water Quality approval for the use of a 401 Water Quality Certification.</li> </ul>	X	
<ul> <li>Wetland, stream and buffer restoration that does not require Division of Water Quality approval for the use of a 401 Water Quality Certification.</li> </ul>	X	
Wildlife passage structures.	X	

<sup>\*</sup>To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in the "Requirements for Categories of Uses" at the end of this Appendix B Table.

#### Requirements for Categories of Uses

Uses designated in this Appendix B Table as exempt and allowable within a riparian buffer shall have the following requirements:

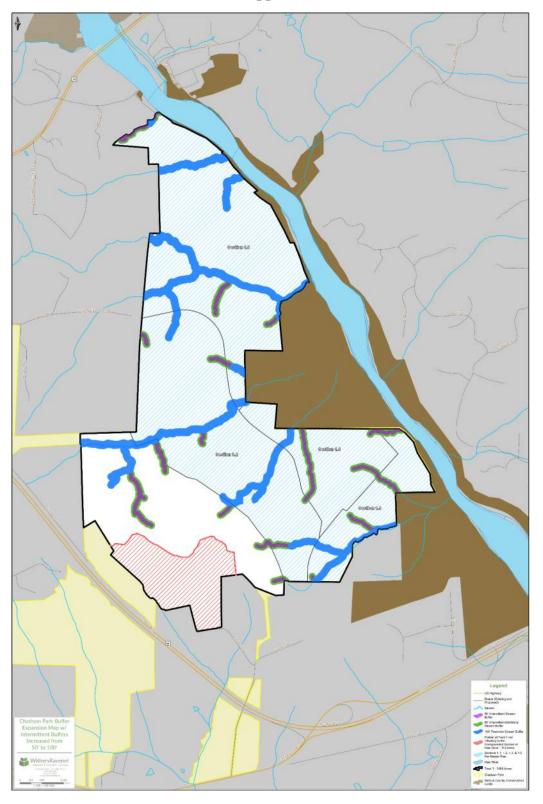
#### 1. Exempt.

Uses designated as exempt are permissible without authorization by the Town of Pittsboro provided that they adhere to the limitations of the activity as defined in this Appendix B Table. In addition, exempt uses shall be designed, constructed and maintained to minimize soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities. However, before approving a development plan that includes exempt uses, the Town may require an applicant to demonstrate that the requirements for exemption are satisfied.

#### 2. Allowable.

Uses designated as allowable may proceed provided that there are no practical alternatives to the requested use pursuant to Section 9.(A) of the RBPO. This includes construction, monitoring, and maintenance activities. These uses require written authorization from the Town of Pittsboro.

### Appendix C



EIS Tract 1 Buffer Map

#### Introduction

Trees and the natural areas in which they grow are a significant part of Pittsboro and Chatham County. The preservation and protection of existing trees and the planting of native trees provide a great number of community benefits that include the enhancement of property values and aesthetics, the treatment and management of stormwater runoff, the protection of existing and the creation of additional wildlife habitat, improved air quality and increased energy savings. This Tree Protection Plan Additional Element (the "Element"), together with the Chatham Park Open Space Element and Landscape Element, provide for the maintenance and protection of existing trees, the planting of new trees, and the further mitigation of development impacts through the planting of street trees and the establishment of perimeter buffers between properties. This Element is a comprehensive ordinance that is appropriate for an urbanizing area such as Chatham Park PDD and that, with other Additional Elements provide a variety of policy mechanisms to achieve tree canopy in Chatham Park PDD.

#### Section 1 Purpose

The primary purposes of this Element are the following:

- 1. Emphasize the importance of trees and vegetation as both visual and physical buffers.
- 2. Moderate temperature and promote energy conservation.
- 3. Promote carbon dioxide absorption and oxygen production.
- 4. Reduce the harmful effects of wind, heat, noise and glare.
- 5. Improve surface drainage and aquifer recharge.
- 6. Reduce soil erosion while promoting soil stabilization and enrichment.
- 7. Provide shade.
- 8. Reduce water pollution.
- 9. Provide wildlife habitat.
- 10. Encourage the protection and planting of native trees.
- 11. Enhance the aesthetic qualities of Chatham Park and its built environment as a means of improving quality of life and attracting new businesses and residents.
- 12. Require owners and developers of properties in Chatham Park to consider acquiring New Trees and other plant materials from nurseries and other landscape supply businesses in Chatham County, subject to availability and competitive pricing.

#### **Section 2 Definitions**

The following definitions are applicable in this Element:

1. "Existing Trees" is defined as trees satisfying the requirements of this Element that exist prior to commencement of any land disturbing activity.

- 2. "Multi-Family Development" is defined as a residential development other than a Single-Family Development.
- 3. "New Trees" is defined as trees satisfying the requirements of this Element that are planted subsequent to commencement of land disturbing activity.
- 4. Tree Coverage Area ("TCA") is defined as that percentage of the acreage of a Lot on which either Existing Trees are retained or New Trees are planted to satisfy the requirements of this Element.
- 5. Tree Coverage Planning Area ("TCPA") is defined as an area of land that contains either a Village Center<sup>1</sup>, a shopping center, a Single-Family Development, or the portion of Section 7.1 as shown on the Master Plan that is located on the north side of Russett Run Road, together with the Existing Trees and/or New Trees needed to satisfy the TCA requirements of this Element for that development type. No single TCPA shall be larger than any Section or Village Center identified in a Small Area Plan.
  - 6. "Residential lot" is defined as a separately platted Lot intended for residential use.
- 7. "Single-Family Development" is defined as a development wherein each residential lot may contain (i) a single residential structure which may contain a maximum of three (3) dwelling units (e.g., one dwelling, duplex or triplex, and also including a single structure with two (2) or three (3) townhouse dwelling units on two (2) or three (3) lots), and/or (ii) multiple residential structures which may contain a maximum of one (1) dwelling unit each (e.g., condominium with one (1) unit per structure).<sup>2</sup>
- 8. "Specimen tree" is defined as any evergreen canopy tree eighteen (18) inches or greater in diameter at breast height ("dbh", which is measured at 4.5 feet above ground level) or greater, any deciduous canopy tree twelve (12) inches dbh or greater and any understory tree (deciduous or evergreen) eight (8) inches dbh or greater, but excluding any tree listed as a non-native invasive plant by the US Forest Service.
- 9. "Shopping center" is defined as two or more businesses, developed under a uniform development plan (subdivision plan or site plan), and consisting of retail sales or retail sales and one (1) or more of the following: professional services; personal services; private recreational uses; movie theaters; food and/or beverage sales.
- 10. "Force Majeure" is defined as an event outside of human control, such as disease or other natural causes or a natural disaster including, without limitation, fire, flood, earthquake, hurricane, or tornado.

<sup>&</sup>lt;sup>1</sup> A Multi-Family Development or other residential development located within a Village Center or applicable portion of Section 7.1 is part of the TCPA for the Village Center or applicable portion of Section 7.1 for purposes of determining TCA.

<sup>&</sup>lt;sup>2</sup> Accessory dwellings in a Single-Family Development are allowed in accordance with applicable Town ordinances.

#### Section 3 Applicability

This Element, together with applicable provisions of other Additional Elements, establish the development standards for TCA required in Chatham Park. Provided, however, TCA is not required in the following areas in Chatham Park:

- 1. Agricultural lands, until such time as the land is used for a non-agricultural purpose.
- 2. Until such time as the land is used for a non-exempt purpose, land under a forestry management program that (a) is prepared by a registered forester in accordance with Chapter 89B of the North Carolina General Statutes, and (b) includes the best management practices described in the version of The North Carolina Forest Service "Best Management Practices Manual" that exists at the time the forestry management program is prepared.

#### **Section 4** Tree Coverage Standards

- 1. Development Plans. Development plans for new development shall include TCA in the applicable percentage required by this Element. As used in this Element, and notwithstanding any other approved definition of such term, the term "development plan" refers to a site plan or a residential subdivision plan.
- 2. Locations. TCA may not be located on a residential Lot. Except as otherwise provided herein, TCA may not be located in a street right of way or in a parking lot. TCA that satisfies the dimensional and other requirements of this Element may be located in any of the following areas:
  - a. Open Space.
- b. Riparian buffers, perimeter buffers established pursuant to the Master Landscaping Plan Additional Element ("Landscaping Element"), or other buffers;
- c. In street right of way medians if the TCA in the median is not less than 1,000 square feet and has no individual dimension of less than 25 feet;
- d. In common areas owned by a property owners' association or in common areas of condominium developments;
  - e. Anywhere on any Lot that is not a residential Lot;
  - f. Anywhere within a TCPA other than on a residential Lot;
  - g. Forested land in the floodway, floodway fringe, or preserved wetlands; and
- h. In a parking lot, when the TCA therein consists of one or more clusters of Existing Trees and/or one or more individual specimen trees.
- 3. TCA Standards. **Table 1, Table 2, and Table 3** establish TCA requirements for Chatham Park for individual Lots and for a TCPA. TCA is expressed as a percentage of the acreage

of a Lot<sup>3</sup> or the acreage of the TCPA on which TCA is calculated. Total TCA Required can be satisfied with Existing Trees, New Trees, or a combination of Existing Trees and New Trees.

#### a. Table 1 - Village Centers

	TCA Consisting of Existing Trees	Total TCA Required	
All Uses	5%	5%	
	3% or more but less than 5%	6%	
	Less than 3%	7%	

## b. Table 2 - Activity Centers (excluding Village Centers) and Section 7.1

	TCA Consisting of Existing Trees	Total TCA Required
All Uses	10%	10%
	8% or more but less than 10%	13%
	6% or more but less than 8%	14%
	Less than 6%	15%

## c. Table 3 - Outside of Activity Centers and Section 7.1

	TCA Consisting of Existing Trees	Total TCA Required
Residential Uses	20%	20%
	15% or more but less than 20%	23%
	10% or more but less than 15%	24%
	Less than 10%	25%
Non-Residential Uses and Mixed- Uses	12%	12%
	8% or more but less than 12%	13%
	6% or more but less than 8%	14%
	Less than 6%	15%

**d. Specific Tree Coverage Standard for Land Within 2,000 feet of Haw River.** Existing Trees shall be retained on not less than thirty-five percent (35%) of the land in Chatham Park that is within 2,000 feet of the top of bank of Haw River. Notwithstanding anything to the contrary herein, Existing Trees that satisfy this requirement may be located in a vegetative setback area, not less than 50 feet wide, on Lots that adjoin the 300' wide Haw River riparian buffer in Section 1.1 on the Master Plan. Vegetative setback areas shall be shown on the recorded plat(s) of these Lots.

<sup>&</sup>lt;sup>3</sup> For a Multi-Family Development, the Lot is the total of the land area on which the building(s) and common elements or common areas are located.

#### NOTES TO TABLE 1, TABLE 2 and TABLE 3:

- 1. For the purpose of calculating TCA, acreage shall be rounded to the nearest 0.01%, with 0.005 or more being rounded up and with less than 0.005 rounded down. For example, assume a 1.57 acre Lot in an Activity Center for which total TCA Required is 14%. 1.57 acres x 14% = 0.219 acre, which is rounded to 0.22 acre.
- 2. For purposes of calculating TCA, the following are excluded from the acreage on which TCA percentage is calculated: land in existing utility easements, land in existing street rights of way, land in proposed street rights of way for freeways, boulevards, expressways, major thoroughfares, and minor thoroughfares depicted on the Highway Map of the Town's comprehensive transportation plan in effect at the time the TCA is calculated; land in existing and proposed public greenways and public parks; and land in water surface areas.
- 3. For the purposes of this Element, "mixed-use" refers to a development that includes residential and non-residential uses in the same building (also referred to as "vertical mixed-use").
  - e. Calculations of TCA are illustrated by the following examples:

## Example 1 – Table 3:

A 100 acre tract that adjoins a minor thoroughfare is proposed for development as a residential subdivision. The 100 acre tract constitutes a TCPA. It has no existing utility easements or streets within the tract. The proposed TCA will consist entirely of Existing Trees. TCA Required by this Element is calculated as follows:  $100 \text{ acres } \times 20\% = 20 \text{ acres } \text{ of TCA Required}$ . See Attachment 1 for a drawing depicting Example 1.

### Example 2 – Table 1:

A 120 acre tract that adjoins a major thoroughfare is proposed for development as a Village Center. The 120 acre tract constitutes a TCPA. It has 1 acre of existing utility easements and 2 acres of proposed public greenway within the tract. The proposed TCA will consist of an area of Existing Trees equal to 4% and an area of New Trees equal to 2%. TCA Required by this Element is calculated as follows: 117 acres (120 acres – 1 acre for existing utility easements and 2 acres for proposed greenway) x 4.0% = 4.68 acres of Existing Trees + 117 acres x 2% = 2.34 acres of New Trees = a total of 7.02 acres of TCA Required. The New Trees will consist of 136 canopy trees (2.34 acres x 43,560 square feet per acre ÷ 750 square feet = 135.9, rounded to 136) and 51 understory trees (2.34 acres x 43,560 square feet per acre ÷ 2,000 square feet = 50.96, rounded to 51).

## Example 3 – Table 3:

A 2 acre Lot that is not in an Activity Center or Section 7.1 and that adjoins a major thoroughfare is proposed for development as mixed-use. There is nothing within the 2 acre Lot to be excluded from the TCA calculation. The proposed TCA will consist of an area of Existing Trees equal to 8% and an area of New Trees equal to 5%. TCA is calculated as follows: 2 acres x 8% = 0.16 acre of Existing Trees + 2 acres x 5% = 0.1 acre of New Trees, for a total TCA Required of 0.26 acre. The New Trees will consist of 6 canopy trees (0.1 acre x 43,560 square feet per acre  $\div$ 

750 square feet = 5.8, rounded to 6) and 3 understory trees (0.1 acre x 43,560 square feet per acre  $\div$  2,000 square feet = 2.17, rounded to 3).

#### Example 4 – Table 2:

A 3 acre Lot in an Activity Center that adjoins a boulevard and is proposed for development of a non-residential use. It has 0.4 acre of greenway proposed within the Lot. The proposed TCA will consist of an area of Existing Trees equal to 7% and an area of New Trees Equal to 7%. TCA required by this Element is calculated as follows: 2.6 acres (3 acres - 0.4 acre for proposed greenway within the 3 acre tract) x 7% = 0.182 acre, rounded to 0.18 acre of Existing Trees + 2.6 acres x 7% = 0.182 acre, rounded to 0.18 acre of New Trees, for a total TCA Required of 0.36 acre. The New Trees will consist of 11 canopy trees (0.18 acre x 43,560 square feet per acre  $\div$  750 = 10.45, rounded to 11) and 4 understory trees (0.18 acre x 43,560 square feet per acre  $\div$  2,000 = 3.92, rounded to 4).

- f. Site Plans and Subdivision Plans. Site plans, and residential subdivision plans with average Lot sizes of 10,000 square feet or less shall include clearing and grading information for the property or applicable phase of the property. Property for which there is an approved site plan, and property for which there is an approved residential subdivision plan for average Lot size of 10,000 square feet or less, may be cleared and graded in whole or in part to accommodate construction of improvements on that property.
- g. Landscaping Element. Existing Trees and New Trees under this Element also can satisfy the landscaping and buffering requirements of the Landscaping Element, as long as all applicable standards can be met.

## **Section 5 Existing Trees**

A TCA of Existing Trees shall meet the following requirements:

- 1. The dimensional requirements in Section 7 of this Element for TCA consisting of Existing Trees.
- 2. Although smaller trees also may be present, the Existing Trees constituting a TCA shall consist of trees with at least a two (2) inch dbh as determined by the Tree Coverage Inventory Field Report.
- 3. The root protection zone for each of the Existing Trees constituting a TCA shall be a radius of one (1) foot for each one (1) inch dbh of the Existing Tree, and at least 75% of those root protection zones shall be located in the TCA.

#### **Section 6** New Trees

A TCA of New Trees shall meet the following requirements:

1. There shall be one (1) canopy tree for each 750 square feet of TCA and one (1) understory tree for every 2,000 square feet of TCA. In instances where planting requirement calculations produce a fraction, the fraction shall be rounded up to the nearest whole number;

- 2. Hardwood canopy trees shall be a minimum of 2.5" caliper<sup>4</sup> at time of planting, and evergreen canopy trees shall be a minimum of 2" caliper at time of planting. Unless otherwise approved by the Board, canopy trees planted on an individual development site or in a TCPA shall be of a type expected to attain a height at maturity of not less than forty feet (40');
- 3. Hardwood and evergreen understory trees shall be a minimum of 1.25" caliper at time of planting. Unless otherwise approved by the Board, understory trees shall be of a type expected to attain a height at maturity of not less than fifteen feet (15'); and
- 4. A minimum of 75% of the New Trees shall be hardwood canopy species. The remaining 25% of the New Trees shall be a mix of canopy and understory hardwood and non-hardwood species, as long as no more than 50% of this remainder consists of pines.
- 5. Unless otherwise approved by the Board, all New Trees shall be species of trees that are native to North Carolina.<sup>5</sup> Property owners who are required to plant New Trees to satisfy the requirements of this Element are required to consider acquiring New Trees and other plant materials from nurseries and other landscape supply businesses in Chatham County, subject to availability and competitive pricing.
- 6. Topsoil native to the applicable Lot or TCPA, or comparable topsoil, shall be used in planting New Trees.
- 7. New Trees shall be planted prior to the issuance of a certificate of occupancy for the improvements on a Lot or the first certificate of occupancy for property in a TCPA or applicable development phase of property in a TCPA (or other document required by Town ordinances prior to occupancy or commencement of use of the improvements on the Lot or in the TCPA, any and all such documents being included in the term "certificate of occupancy", also referred to herein as "CO"). If the owner of the Lot or applicable portion of a TCPA desires to postpone installation of landscaping because seasons and weather conditions are not appropriate for the installation of landscaping immediately prior to issuance of a CO, but does not desire to have issuance of a CO delayed until the New Trees are planted, a performance bond, irrevocable letter of credit, cash deposit, or other surety acceptable to the Town, or some combination thereof, (all of the foregoing, individually or together, being referred to herein as "financial security") may be provided by the owner as provided herein. All New Trees covered by the financial security shall be installed within the first three (3) months of the next planting season after the use of the Lot or applicable portion of the TCPA is commenced (the "Final Completion Date"). For good cause shown, the Planning Director may grant one (1) or more extensions of the Final Completion Date for a total period of time not to exceed one (1) year. The months of June, July and August are considered seasons or

<sup>&</sup>lt;sup>4</sup> caliper" is the diameter of a tree trunk measured at a height of 6 inches above ground level for field grown stock and 6 inches above the soil line for container grown stock.

<sup>&</sup>lt;sup>5</sup> For the purposes of this Element: (i) "native tree" is defined as a tree that either is a part of the balance of nature that has developed in North Carolina over hundreds or thousands of years or is a non-native and non-invasive tree that does not need human help to reproduce and maintain itself over time in an area where it is not native; and (ii) "invasive tree" is defined as a tree that is both non-native and able to establish on many sites, grow quickly, and spread to the point of disrupting plant communities or ecosystems.

weather conditions which are not appropriate for planting New Trees, unless an adequate irrigation system is installed and operated to irrigate the New Trees.

When the required financial security is provided and all other requirements for issuance of a CO have been satisfied, the Town shall issue the CO, even though all of the New Trees have not yet been planted. The financial security shall be accompanied by documentation of the estimated cost of the New Trees to be planted. The documentation of estimated cost may consist of a landscaping contractor's bid or contract, a bill from a plant or landscaping nursery, or similar document. The financial security shall be for an amount equal to one and one-quarter (1½) times the cost of the New Trees plus installation for the New Trees yet to be installed, based upon the highest estimate provided (the "Required Amount"). The various forms of financial security are subject to the following requirements:

- a. Performance Bond. A performance bond shall: (1) Be issued for the benefit of the Town, with the Planning Director as the authorized agent for the Town; (2) Be in the Required Amount; (3) Be in effect until New Trees secured by the performance bond have been planted in accordance with the requirements of this Element and the Planning Director has executed a written release of the performance bond; and (4) Be issued in a form approved by the Town.
- b. Irrevocable Letter of Credit. An irrevocable letter of credit ("LOC") shall: (1) Be issued for the benefit of the Town, with the Planning Director as the authorized agent for the Town; (2) Be in the Required Amount; (3) Be in effect until the New Trees secured by the LOC have been planted in accordance with the requirements of this Element and the Planning Director has executed a written release of the LOC; (4) Be issued in a form approved by the Town; and (5) Be issued by a financial institution that shall allow for presentment upon default at a location within 25 miles of the corporate limits of the Town.
- c. Cash Deposit. A cash deposit or other instrument readily convertible to cash at face value (both of which are included in the term "cash deposit") shall (1) Be deposited with the Town and held by the Town in a separate, interest bearing account, and all interest earned on the cash deposit shall become part of the cash deposit; (2) Be in the Required Amount; and (3) Be held by the Town until the New Trees secured by the cash deposit have been planted in accordance with the requirements of this Element and the Planning Director has executed a written release, at which time the cash deposit shall be disbursed by the Town to the person who made the cash deposit.

In the event that the Town draws on a performance bond or LOC, or uses a cash deposit to complete the planting of New Trees required by this Element, the balance, if any, remaining after completion of the planting shall be disbursed by the Town to the person who provided the financial security. The Planning Director may authorize reduction in the amount of any performance bond or LOC, or release of portions of a cash deposit, as portions of the New Trees secured by the applicable financial security are planted.

8. If a New Tree planted in connection with issuance of a CO pursuant to the immediately preceding subsection 7 dies or is destroyed, for any reason other than an event of Force Majeure,

within one (1) year of the later of the date on which the New Tree is planted or (i) a CO is issued for a building on the individual development site on which the New Tree is planted or (ii) the first CO is issued for a building in the same TCPA or applicable phase of the TCPA in which the New Tree is planted, it shall be replaced by the then owner of the property on which it was planted as soon as reasonably practicable after such death or destruction, giving appropriate consideration to the time of year most favorable to the survival of such replacement New Tree after it is planted. The replacement New Tree shall be the same or substantially similar species as the dead or destroyed New Tree and shall be not less than the same size at the time of planting as the size required by this Element for the dead or destroyed New Tree at the time it was planted.

#### **Section 7 Dimensional Standards for Clusters of Trees**

- 1. To satisfy TCA requirements for individual development sites greater than one (1) acre and for a TCPA:
- (a) a cluster of trees consisting entirely of Existing Trees shall be a minimum of 1,000 square feet and have no individual dimension of less than 25 feet; and
- (b) a cluster of trees consisting entirely of New Trees or a combination of Existing Trees and New Trees, shall be a minimum of 1,000 square feet and have no individual dimension less than 25 feet.
  - 2. To satisfy TCA requirements for individual development sites one (1) acre or less:
- (a) a cluster of trees consisting entirely of Existing Trees shall be a minimum of 500 square feet and have no individual dimension less than 13 feet; and
- (b) a cluster of trees consisting entirely of New Trees or a combination of Existing Trees and New Trees, shall be a minimum of 500 square feet and have no individual dimension less than 15 feet.
- 3. Notwithstanding the foregoing dimensional standards, when a riparian buffer that would satisfy the requirements of this Element for TCA is separated into two or more portions by a street, utility easement, greenway, or multi-use path, the separate portions of that riparian buffer will continue to be TCA if those portions as combined satisfy the requirements of this Element for TCA. Provided, no portion of the riparian buffer within the street, utility easement, greenway, or multi-use path shall be counted or qualify as TCA. For example, a 30-foot wide greenway easement is dedicated in a 100-foot wide riparian buffer that satisfies the requirements of this Element for TCA, resulting in a separation of the riparian buffer into two (2) portions, one (1) of which is twenty (20) feet wide and the other of which is fifty (50) feet wide. These two separate portions of the riparian buffer, when combined, satisfy the requirements of this Element for TCA. Accordingly, these two separate portions of the riparian buffer continue to be TCA, but the portion of the riparian buffer within the thirty (30) foot wide greenway easement does not count or qualify as TCA.

#### **Section 8** Protection of Trees

Property owners or applicable property owners' associations are responsible for protecting and preserving Existing Trees and New Trees that constitute the TCA located on their properties or in the TCPA serving their properties, both during and after the development process, in accordance with standard horticultural practice and this Section 8.

Existing Trees qualifying as TCA also shall be protected as follows.

- 1. Protection measures to be used during grading and construction, including details of the tree protection fence(s) and its location(s), shall be shown on the site, landscape, grading, utility, demolition, and erosion control plans.
- 2. A tree protection fence constructed of a material resistant to degradation by sun, wind, and moisture for the duration of the construction, shall be installed around the TCA at the same time as the sedimentation and erosion control measures are installed, and shall remain in place and be repaired or replaced as necessary until all construction on the applicable Lot or in the portion of the applicable TCPA adjacent to the TCA is complete. Such fencing shall be mounted on metal posts placed no further than ten (10) feet apart. Silt fencing that does not meet the foregoing requirements for tree protection fencing is not tree protection fencing for the purposes of this Element.
- 3. No storage of materials, dumping of waste materials, fill, or parking of equipment is allowed within the root protection zone, and no trespassing is allowed within the boundary of the root protection zone, and no trespassing shall be so noted on the grading and sedimentation and erosion control plans and posted at each end of the tree protection fence with perimeter signs spaced a minimum of 100 feet on center thereafter.
- 4. The Town shall (i) refuse to issue a zoning compliance permit, (ii) deny a building permit, and (iii) refuse to approve a site plan or subdivision plan for a period of five (5) years after the completion of a timber harvest if the harvest results in the removal of all or substantially all of the trees that were protected under Town regulations governing development from the tract of land for which the permit or approval is sought, which would constitute a willful violation of the Town regulations. For the purposes of this paragraph: (a) "trees that were protected under Town regulations" are Existing Trees; and (b) "removal of all or substantially all of the trees" is removal of Existing Trees that results in Existing Trees remaining on an individual development site or within a TCPA being less than the percentage of the individual development site or TCPA required to satisfy the TCA requirements of this Element solely with Existing Trees. Provided, however, with the approval of the Board of Commissioners, the foregoing time periods for refusing to issue a zoning compliance permit or denying a building permit or refusing to approve a site plan or subdivision plan may be reduced or waived.

#### **Section 9 Establishing TCA**

TCA shall be established in accordance with the provisions of this Section for each development plan submitted to the Town for which TCA is required.

- 1. A "Tree Coverage Inventory Field Report" with respect to an individual development site, or TCPA, as applicable, shall be prepared by a certified arborist, a registered landscape architect, licensed professional engineer, or a registered forester. A Tree Coverage Inventory Field Report shall include all of the following:
- a. A written general description of the trees existing on the individual development site or in the TCPA including species, sizes, forest canopy and understory characteristics, and predominant natural plant communities. For the purposes of this Element, a natural plant community is a recurring group of trees found in a particular physical environment. Factors that may be considered in determining the existence of a natural plant community are the following: species composition; vegetation structure (e.g., forest, shrubland, or marsh); and physical conditions (e.g., water, light, and topography); and
- b. The most current aerial photograph(s) available from Chatham County Geographic Information Services or from any other comparable source showing the approximate limits of the individual development site, or TCPA.
- 2. A "Sampling Report" with respect to each proposed TCA on an individual development site or in a TCPA, as applicable, shall be prepared by a certified arborist, a registered landscape architect, a licensed professional engineer, or a registered forester. A Sampling Report shall include all of the following:
- a. A written specific description of a 20 foot x 20 foot area for each predominant natural plant community within each proposed TCA that includes the following for trees that are two (2) inches dbh or greater in size: species; sizes; density; forest canopy and understory characteristics; and
  - b. Photographs representative of the sampling area.

The Tree Coverage Inventory Report and the Sampling Report shall be included with the first submittal to the Town of the applicable development plan. Provided, if the development is a phased development, the Sampling Report may be submitted on a phase by phase basis.

- 3. The proposed development plan shall include the following:
- a. The required TCA percentage.
- b. The proposed location and acreage of TCA.
- c. The composition of the proposed TCA, i.e. Existing Trees and/or New Trees.
- d. If property in a TCPA is to be developed in phases, the approved subdivision plan or site plan shall identify the TCA for each phase. The TCA for a phase may be less than the TCA that would be required for the land in that phase if it were developed separately from the remaining

phases, as long as the TCA required for the entire TCPA is satisfied when all phases are developed. TCA within a TCPA may not be used to satisfy the TCA requirements for another TCPA.

e. Following final determination of TCA and approval by the Town of a plat showing the metes and bounds of the boundaries of the TCA and the total area (in acreage and square footage) of the TCA, and prior to issuance of a certificate of occupancy for the applicable Lot or the issuance of the first certificate of occupancy for the applicable TCPA or phase thereof, the development plan applicant shall record the plat in the office of the Register of Deeds for Chatham County,

## **Section 10** Individual Specimen Trees Constituting TCA

The following are the requirements for an individual specimen tree to qualify as TCA:

- 1. A specimen tree survey shall be provided to the Town that shows the specific location, species, size and root protection zone of the specimen tree. This survey shall be included with the submission of the applicable development plan.
- 2. The root protection zone shall be a radius around the tree of 1.25 feet for each inch of tree dbh. Eighty percent (80%) of the tree's root protection zone shall be protected from disturbance, and any disturbance shall be limited to one side of the root protection zone (e.g., north side, east side, south side, or west side). If a proposed disturbance to the root protection is known prior to the time the specimen tree survey is provided to the Town, a report from a certified arborist as to the health of the specimen tree and recommendations to mitigate the impact of the disturbance shall be included with the specimen tree survey; otherwise, such an arborist report shall be provided to the Town prior to any such disturbance.
- 3. TCA for an individual specimen tree is calculated at 150% of the size of the portion of the root protection zone protected from disturbance; provided, however, specimen trees that are located in the floodway, floodway fringe, preserved wetlands and riparian buffers, are not eligible for the foregoing 150% calculation.
- 4. If an individual specimen tree that receives TCA credit under this Element dies or is destroyed, for any reason other than an event of Force Majeure, within one (1) year of the date on which (i) a CO is issued for a building on the individual development site on which the individual specimen tree is located or (ii) the first CO is issued for a building in the same TCPA or applicable development phase of the TCPA in which the individual specimen tree is located, the then owner of the property on which the individual specimen tree is located shall plant one (1) or more replacement trees of the same or substantially similar species as the dead or destroyed individual specimen tree that together total the same number of caliper inches as the dbh inches of the dead or destroyed individual specimen tree at the time of its death or destruction.

#### **Section 11 Uses Allowed in TCA**

- 1. Once approved as part of a development plan and/or designated as such on a recorded plat, TCA shall remain undisturbed except as provided below:
  - a. Removal of diseased trees posing a threat to adjacent trees or property, structures, traffic, utilities, or public safety;
  - b. Removal of underbrush and invasive/exotic plants of the Southeast as identified by North Carolina State University Cooperative Extension;
  - c. Removal of dead or naturally fallen trees;
  - d. Removal of trees with less than two (2) inch dbh;
  - e. Planting of trees and other vegetation, except within the root zone of an individual specimen tree;
  - f. Construction and maintenance of greenways and multi-use paths, including paving, by a governmental entity;
  - g. Installation of unpaved walking paths and foot trails constructed with minimal disturbance of tree roots and existing vegetation, provided that no healthy tree eight inches dbh or greater is allowed to be removed for the construction of any walking path or foot trail;
  - h. Inclusion of Open Space amenity areas containing such items as picnic tables and benches provided that such areas are unpaved and no larger than 200 square feet or 10% of the TCA, whichever is smaller. No tree eight inches dbh or greater is allowed to be removed for the construction of an Open Space amenity area;
  - i. Passive recreational uses not involving the clearing of Existing Trees;
  - j. Installation and maintenance of public streets;
  - k. Installation and maintenance of utilities by a governmental entity or a provider of public utility services. For the purposes of this Element, a "provider of public utility services" is a person or legal entity who either is licensed by the Town or other governmental entity, is regulated by the North Carolina Utilities Commission or other governmental entity, or who has a franchise agreement with the Town or other governmental entity; and
  - 1. Disturbance as may be necessary for surveying, environmental investigation, and soil investigation;
  - m. Selective thinning of trees and elimination of overstock to maintain the health of other trees in TCA;
  - n. Stormwater Control Measures that are designed to include plant material may be located in TCA or in TCPA;
  - o. Activities permitted by the Open Space element in riparian buffers that qualify as TCA under this Element; and
  - p. Any other activities approved by the Town Board.
- 2. With respect to any of the foregoing activities, permanent easements and temporary construction easements may be granted or reserved by recorded document or plat. Greenways, multi-use paths, utilities provided by a governmental entity or a provider of public utility services, and public and private streets and street rights of way may be dedicated or conveyed to the applicable governmental entity or property owners' association or provider of public utility services. The area of any TCA disturbed under the foregoing subparagraphs f, j, and k, except for

any areas taken by eminent domain or the threat thereof, shall be replaced by additional TCA as necessary to meet the requirements of this Element.

3. Trees planted in or adjacent to a SCM may qualify as TCA when they meet all of the requirements of this Element applicable to New Trees. All buildings and stormwater facilities (except for stormwater facilities that include TCA) shall be set back at least 10 feet from the edge of any TCA.

#### **Section 12** TCA in Open Space

Open Space that meets the requirements of this Element may constitute TCA.

#### **Section 13** Canopy and Understory Tree Resources

The following are resources that can be utilized in determining the species of canopy and understory trees to be planted:

North Carolina Forest Service – Common Forest Trees of North Carolina

North Carolina State Extension

North Carolina Native Plant Society

North Carolina Audubon Society

North Carolina Botanical Garden

#### ATTACHMENT 1 TO CHATHAM PARK TREE PROTECTION ELEMENT



# 4. Landscaping Element

# Section 1. Purpose & Applicability Purpose

The primary purpose of this Master Landscaping Plan Additional Element ("Landscaping Element" or "Element") is to establish an overall visual quality and character of trees and other plant material that is discernible and consistent throughout Chatham Park. The objectives of this Element are the following:

- 1. To promote and increase design compatibility between different land uses and provide attractive views from streets and adjacent properties;
- 2. To assist in delineating separations of spaces, structures, uses, and activities on a site, or between adjacent sites;
- 3. To shield properties from potentially adverse impacts of adjacent land uses and activities;
- 4. To enhance the streetscape by separating the pedestrian from motor vehicles, reducing glare, moderating temperatures of impervious areas, filtering air of fumes and dust, providing shade, attenuating noise, and lessening the visual impact of large expanses of pavement;
- 5. To mitigate adverse grade changes between adjacent properties;
- 6. To improve the quality of the built and natural environments through air quality enhancements, energy conservation, reductions in the amount and rate of stormwater runoff and soil erosion, improve the quality of stormwater runoff, and increase the capacity for groundwater recharge; and
- 7. To enhance the appearance and value of both residential and non-residential properties.

#### **Applicability**

The standards, requirements, and criteria (those words being used interchangeably herein) in this Element apply to both residential and non-residential uses in Chatham Park unless otherwise indicated. As used in this Element, and notwithstanding any other approved definition of such term, the term "development plan" shall refer to a site plan or a residential subdivision plan.

- 1. New Development: Except as otherwise provided herein, the standards apply to all new development projects in Chatham Park.
- 2. Expansions and Changes of Use: For all development of property that requires a site plan approval by the Town, the standards also apply to changes of use of previously developed property, and expansions of existing uses when the increase in the gross heated square footage of an existing building is more than 25% or expansions of parking areas are by more than 25%.

## Section 2. Perimeter Buffers and Boundary Transitions

## Applicability

Except as otherwise provided in this Element, perimeter buffers along boundary lines of Lots in Chatham Park are required as provided in Table 2.1 of this Element. Perimeter buffers and perimeter boundary transitions may consist of existing vegetation, new landscaping material, or a combination of both. References in this Element to "planted trees", "planted vegetation", "plantings", or other similar reference include existing trees and other existing vegetation that comply with the standards of this Element. Whenever new landscaping material is used, such material shall consist of drought-tolerant plantings to reduce the need for irrigation systems.

### **Exemptions**

Notwithstanding anything to the contrary in this Element, perimeter buffers on a Lot or an IMUD are not required in the following instances:

- (i) Adjacent to a public or private street right of way or other transit right of way, when a streetscape buffer or street trees are required by this Element.
- (ii) Adjacent to "Required Open Space" (as defined in the Master Open Space Plan Additional Element), when the width of the Required Open Space equals or exceeds the minimum width of the applicable perimeter buffer specified in Table 2.1. However, if the width of such Required Open Space does not equal or exceed the width of the applicable perimeter buffer specified in Table 2.1, vegetation meeting the applicable standards of this Element shall be planted to increase the width to satisfy the width requirement of Table 2.1;
- (iii) Adjacent to TCA or TCPA (as TCA or TCPA is defined in the Master Tree Protection Plan Additional Element) when the width of the TCA or TCPA equals or exceeds the minimum width of the applicable perimeter buffer specified in Table 2.1. However, if the width of such TCA or TCPA does not equal or exceed the width of the applicable perimeter buffer specified in Table 2.1, vegetation meeting the applicable standards of this Element shall be planted to increase the width to satisfy the width requirement of Table 2.1;
- (iv) Adjacent to a utility easement or an access easement, when the width of the utility easement or access easement equals or exceeds the minimum width of the applicable perimeter buffer specified in Table 2.1. However, if the width of such utility easement or access easement does not equal or exceed the width of the applicable perimeter buffer specified in Table 2.1, vegetation meeting the applicable standards of this Element shall be planted to increase the width to satisfy the width requirement of Table 2.1;
- (v) Adjacent to a BMP, when screening of the BMP is done in accordance with Section 9 of this Element:

(vi) Along common boundaries of Lots in Section 7.1 and along common boundaries of Lots in Village Centers in Chatham Park. Provided, however, perimeter buffers in accordance with this Element shall be provided along common boundaries of Lots in Section 7.1 and Lots outside of Section 7.1 and along common boundaries of Lots in Village Centers and Lots outside of Village Centers.

With respect to Section 7.1 and Village Centers in Chatham Park PDD, the perimeter buffer requirements of this Element shall apply only to boundaries between Lots in Section 7.1 and Lots outside of Section 7.1 and between Lots in a Village Center and Lots outside a Village Center, and not to boundaries between Lots that are in Section 7.1 or Lots that are in a Village Center.

If adequate vegetation to satisfy the perimeter buffer requirements of this Element does not exist on a Lot, or has been disturbed as allowed by this Element or any other development regulation applicable in Chatham Park, the perimeter buffer requirements of this Element may be satisfied by planting new vegetation meeting the requirements of this Element.

#### Type and Width of Required Perimeter Buffers

**Table 2.1** specifies the type of perimeter buffer that must exist or be provided as development occurs, subject to modifications as allowed in this Element or any other Additional Element (for example, reduction in buffer width where a fence is utilized). The buffer type is indicated by letter and the total buffer width in feet is indicated by number. The width and density of the required perimeter buffers are determined based upon the land use classification described in **Table 2.2**.

Table 2.1. Required Width of Vegetated Perimeter Buffer by Land Use Class

Land Use Class	Adjacent Land Use Class						
	1	2	3	4	5	6	7
1	0	10	10	10	20	20	20
	-	В	В	В	В	В	В
2	10	0	20	20	30	30	50
_	В	-	В	A	A	A	A
3	10	20	20	20	30	30	50
	В	В	В	A	A	A	A
4	10	20	20	20	20	20	50
	В	A	A	C	В	В	В
5	20	30	30	20	20	20	50
	В	A	A	В	С	В	В
6	20	30	30	20	20	20	30
	A	A	A	В	В	С	В
7	20	50	50	50	50	30	20
,	A	A	A	A	A	A	A

#### Land Use Classes

# Table 2.2: Land Use Classes (per Table of Permitted Uses in Chatham Park PDD Master Plan)

CLASS	USES INCLUDED
Class 1	-Uses permitted under the <i>Agricultural Uses</i> category, including produce standsCemetery or mausoleumPublic Parks and golf courses without sports lightingOpen Space, including private parks.
Class 2	-Single-family detached dwellings in subdivision where the average lot size is equal to or greater than six thousand square feet (6,000 SF).
Class 3	-Single-family detached dwellings in subdivision where the average lot size is less than six thousand square feet (6,000 SF).  - Condominium developments containing detached condominium units.
Class 4	-Athletic fields (public and private) with sports lighting.  -Uses permitted under the <i>Residential Uses</i> category.  - Adult care homes.  -Neighborhood recreation centers, indoor and outdoor (public and private, including recreational facilities owned by a property owners' association).  -Office uses with a gross floor area on the property of fifty thousand square feet (50,000 SF) or less.  -Parking lots as a principal use containing less than fifty (50) parking spaces.  -Uses permitted under the <i>Educational &amp; Institutional Uses</i> use category.
Class 5	-Uses permitted under the <i>Recreational Uses</i> category.  - Office uses with a gross floor area on the property of more than fifty thousand square feet (50,000 SF).  - Parking lots as a principal use containing more than fifty (50) parking spaces.  - Utility substation, minor.
Class 6	-Uses permitted under the <i>Business</i> , <i>Professional</i> , and <i>Personal Services</i> category; - Commercial condominiumsUses permitted under the <i>Retail Trade</i> category Shopping centers.
Class 7	-Uses permitted under the <i>Wholesale Trade</i> categoryUses permitted under the <i>Transportation, Warehouse, and Utilities</i> category Uses permitted under the <i>Manufacturing and Industrial</i> category Uses permitted under the <i>Mining Uses</i> category Correctional, penal institutions, jails

#### **NOTES for Table 2.2**

- 1. When a specific use from a particular Use Type in the Table of Uses in the Chatham Park PDD Master Plan is included in a Class different from the Class that includes the Use Type, the Class in which the specific use is included controls.
- 2. Uses not addressed in Table 2.2 may be assigned to a Class by the owner/applicant, based upon the characteristics of the proposed use and of the Class to which it is assigned, subject to approval of the Planning Director.

#### **Determining Perimeter Buffers**

Perimeter buffers required by this Element shall be determined and provided in accordance with the following:

- 1. Except as otherwise allowed in this Element or any other Additional Element, the minimum width and Type of perimeter buffer shall be as provided in Table 2.1.
- 2. Except when an exemption applies pursuant to Section 2 of this Element, perimeter buffers on Lots that have Class 7 Land Uses shall always include a Type A Buffer of the width specified for Class 7 Land Uses in Table 2.1.
- 3. Subject to applicable exemptions and modifications in this Element, upon development of a parcel adjacent to an undeveloped parcel, the first parcel to develop shall provide a perimeter buffer in accordance with Table 2.1. In the application of Table 2.1, the undeveloped parcel shall be assigned a Land Use Class based on the use provided for the undeveloped parcel in the applicable Small Area Plan; provided, however, if the applicable Small Area Plan allows the undeveloped parcel to be developed under more than one Land Use Class, it shall be assumed that the undeveloped parcel will be developed under the most intense Land Use Class (Class 1 being the least intense Land Use Class and Class 7 being the most intense Land Use Class). Unless an exemption provided for in Section 2 of this Element applies, when later developed, the undeveloped parcel shall provide a perimeter buffer adjacent to the previously developed parcel with not less than one-half (½) the width and not less than one-half (½) the number of plants for the perimeter buffer otherwise required by Table 2.1 for the applicable Land Use Class for the proposed development, and without any other reductions in the width of the perimeter buffer that otherwise could be allowed under this Element.
- 4. Owners of adjacent Lots may enter into a written agreement that allocates the required perimeter buffer width along the common boundary line of those Lots in a manner different from the foregoing provisions of this subsection (a "buffer agreement"). The buffer agreement shall be submitted to the Planning Director prior to approval of a development plan on any of the properties subject to the buffer agreement, and it shall be depicted and noted on and become part of any approved development plan for the properties subject to the buffer agreement. Prior to the issuance of a building permit for the first of any Lot subject to the buffer agreement, it shall be recorded in the office of the Register of Deeds for Chatham County, North Carolina at the expense of the owner of the Lot for which the building permit is to be issued and it shall reference the file number, if any, assigned to the development plan by the Town. A copy of the recorded buffer agreement shall be provided to the Planning Director. Prior to the issuance of each subsequent building permit for any Lot subject to the buffer agreement, a document that incorporates the buffer agreement by reference shall be recorded in the office of the Register of Deeds for Chatham County, North Carolina at the expense of the owner of the Lot for which the building permit is to be issued and the document shall reference the file number, if any, assigned to the development plan by the Town. A copy of the recorded document shall be provided to the Planning Director. Neither the buffer agreement nor any subsequent document referencing the agreement shall be modified or amended without the written approval of the Planning Director. Provided, however, and notwithstanding the preceding sentence, modification of a buffer

agreement or any subsequent document addressing a buffer agreement with respect to a perimeter boundary transition on a land use in Chatham Park that is identified as permitted by SUP ("Special Use Permit") only" in the Town's Zoning Ordinance, and which is located within five hundred feet (500') of a perimeter boundary of Chatham Park, may be approved only by the Town Board.

#### **Perimeter Boundary Transitions**

A perimeter boundary in Chatham Park is a boundary of land in Chatham Park that adjoins land that is not in Chatham Park. The Master Plan requires perimeter boundary transitions along the perimeter boundaries in Chatham Park. Unless an alternative perimeter boundary transition is approved by the Planning Director, the perimeter buffer requirements of this Element apply to perimeter boundary transitions between a Lot in Chatham Park and an adjoining property not in Chatham Park. Provided, however, when Other Exemption iv. in Section 2 of this Element applies, the perimeter buffer specified in Table 2.1, reduced by one-half (½) the width and one-half (½) the required plantings, is required. For purposes of determining the perimeter buffer required on the property in Chatham Park, the use allowed on the Land Use Class of the adjoining property not in Chatham Park shall be determined in accordance with the zoning classification of that property at the time the proposed development plan for the property in Chatham Park is submitted to the Town. Any question as to what Land Use Class is applicable to the property not in Chatham Park shall be resolved by the Planning Director. If additional property is added to Chatham Park that adjoins an existing perimeter boundary of Chatham Park, the perimeter boundary transitions will apply to the perimeter boundary of the additional property and not to the former existing perimeter boundary. When the perimeter buffer requirements of this Element are applicable to perimeter boundary transitions, the owner of a Lot in Chatham Park PDD and the owner of an adjoining property not in Chatham Park PDD may enter into a written agreement that allows part or all of the perimeter buffer required on the Lot in Chatham Park PDD to be located on the adjoining property not in Chatham Park PDD. This agreement shall be subject to the same requirements as a buffer agreement described in paragraph no. 4 under the "Determining Perimeter Buffers" portion of this Element. Provided, however, no such buffer agreement shall eliminate or reduce any buffers on the property located outside of Chatham Park PDD that are required by applicable Town ordinances.

#### Types of Perimeter Buffers

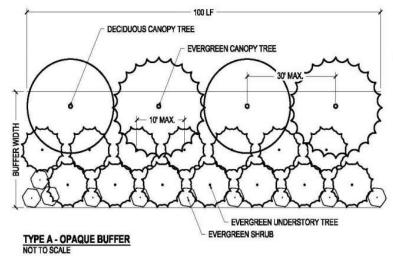
The three (3) types of landscaped buffers that appear in Table 2.1 are as follows (drawings of these buffers are illustrative of the placement of trees and other planting materials that satisfy the buffer planting requirements):

## 1. Type A: Opaque Buffer

This buffer is intended to provide the greatest degree of screening of the three buffer types and minimize visual contact between uses, creating a strong impression of total separation from the ground to a height at maturity of not less than fifteen feet (15'). Vegetative material within this buffer shall meet the following criteria:

a. A minimum of four (4) canopy trees shall be planted for every

- one hundred linear feet (100 LF) of buffer, with a maximum spacing of thirty feet (30') between trees. Canopy trees shall be of a type expected to attain a height at maturity of not less than thirty feet (30'). Not less than fifty percent (50%) of the required canopy trees shall be evergreen. The minimum caliper size of new deciduous canopy trees installed shall be two and one-half inch (2½") caliper and the minimum size of new evergreen canopy trees installed shall be two inch (2") caliper.
- b. All understory trees shall be evergreen. In a Type A buffer thirty feet (30') or more in width, a minimum of fourteen (14) understory trees shall be planted for every one hundred linear feet (100 LF) of buffer, with a maximum spacing of ten feet (10') between trees. In a Type A buffer less than thirty feet (30') in width, a minimum of seven (7) understory trees shall be planted for every one hundred linear feet (100 LF) of buffer, with a maximum spacing of twenty feet (20') between trees. Understory evergreen trees shall be of a type expected to attain a height at maturity of not less than fifteen feet (15'). The minimum caliper size of new understory trees installed shall be one and one-quarter inch (11/4") caliper.
- c. Type A buffers that are wider than thirty feet (30') shall include ten (10) shrubs/ornamental grasses per one hundred linear feet (100 LF) of buffer. Shrubs and ornamental grasses shall be of a type expected to attain a height at maturity of not less than three feet (3') and shall be an evergreen species locally adapted to the area. The minimum height of new shrubs installed shall be eighteen inches (18") and the minimum height of new ornamental grasses installed shall be twelve inches (12").
- d. Type A buffers may include a wall, fence, earthen berm, planted vegetation, or any combination of the foregoing. If a fence or wall a minimum of six feet (6') in height is included, the required buffer width and the required number of plantings shall be reduced by one-half (½). If an earthen berm a minimum of four feet (4') in height is included, and the understory trees and shrubs/ornamental grasses are planted on the berm, the required buffer width and the required number of plantings shall be reduced by one-half (½). A side slope of an earthen berm may not exceed 3:1 unless stabilized with shrubs and/or ornamental grasses, and a side slope of an earthen berm that is stabilized with shrubs and/or ornamental grasses may not exceed 2:1.



#### TYPE A BUFFER INTENT FORMATION OF AN OPAQUE SCREEN FROM THE

## GROUND TO A HEIGHT OF AT LEAST 15'

#### MINIMUM PLANTING REQUIREMENTS

- MINIMUM 4 CANOPY TREES PER 100 LF
- 50% OF ALL NEW CANOPY TREES SHALL BE **FVERGREEN**
- MATURE HEIGHT = 30'
- DECIDUOUS TREES INSTALLED SIZE = 2.5" CAL.
- EVERGREEN TREES INSTALLED SIZE = 2.0" CAL

#### UNDERSTORY TREES

- MINIMUM 14 UNDERSTORY TREES PER 100 LF FOR BUFFER WIDTH 30' OR MORE, (MINIMUM 7 PER 100 LF FOR BUFFER WIDTH LESS THAN 30')
- 100% OF ALL NEW UNDERSTORY TREES SHALL BE EVERGREEN
- MATURE HEIGHT = 15'
- INSTALLED SIZE = 1.25" CAL.

#### SHRUBS / ORNAMENTAL GRASSES

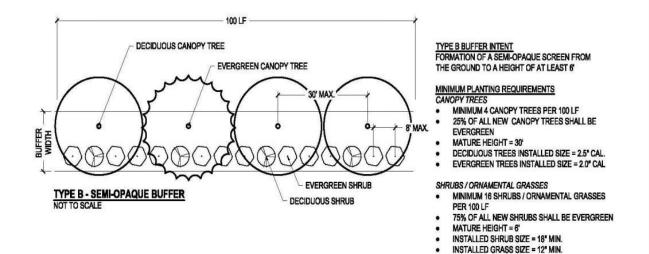
- INSTALLED AT A DENSITY OF 10 SHRUBS / ORNAMENTAL GRASSES PER 100 LF FOR BUFFER WIDTH OF 30' OR MORE
- MATURE HEIGHT = 3'
- INSTALLED SHRUB SIZE = 18" MIN.
- INSTALLED GRASS SIZE = 12" MIN.

### 2. Type B: Semi-Opaque Buffer

This buffer is intended to function as a semi-opaque screen from the ground to a height at maturity of not less than six feet (6'). Vegetative material within this buffer shall meet the following criteria:

- a. A minimum of four (4) canopy trees shall be planted for every one hundred linear feet (100 LF) of buffer, with a maximum spacing of thirty feet (30') between trees. Canopy trees shall be of a type expected to attain a height at maturity of not less than thirty feet (30'). Not less than twenty-five percent (25%) of the required canopy trees shall be evergreen. The minimum caliper size of new deciduous canopy trees installed shall be two and one-half inch  $(2\frac{1}{2})$  caliper and the minimum size of new evergreen canopy trees installed shall be two inch (2") caliper.
- b. A minimum of sixteen (16) shrubs and/or ornamental grasses shall be planted for every one hundred linear feet (100 LF) of buffer, with a maximum spacing of eight feet (8') between shrubs/ornamental grasses. Shrubs and ornamental grasses shall be of a type expected to attain a height at maturity of not less than six Not less than seventy-five percent (75%) of the shrubs/ornamental grasses shall be an evergreen species locally adapted to the area. The minimum height of new shrubs installed shall be eighteen inches (18") and the minimum height of new ornamental grasses installed shall be twelve inches (12").

c. Type B buffers may include a wall, fence, earthen berm, planted vegetation, or any combination of the foregoing. If a fence or wall a minimum of six feet (6') in height is included, the required buffer width and the required number of plantings shall be reduced by one-half (½). If an earthen berm a minimum of four feet (4') in height is included, and the understory trees and shrubs/ornamental grasses are planted on the berm, the required buffer width and the required number of plantings shall be reduced by one-half (½). A side slope of an earthen berm may not exceed 3:1 unless stabilized with shrubs and/or ornamental grasses, and a side slope of an earthen berm that is stabilized with shrubs and/or ornamental grasses may not exceed 2:1.

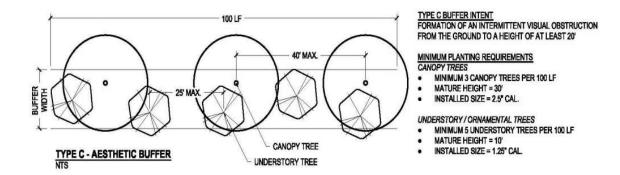


#### 3. Type C: Aesthetic or "Broken" Buffer

This buffer area is intended to function as an intermittent visual obstruction from the ground to a height at maturity of not less than twenty feet (20'), and create the impression of spatial separation without eliminating visual contact between uses. Vegetative material within this buffer shall meet the following criteria:

- a. Canopy trees shall be at a density of three (3) trees for every one hundred linear feet (100 LF) of buffer, with a maximum spacing of forty feet (40') between trees. Canopy trees shall be of a type expected to attain a height at maturity of not less than thirty feet (30'). The minimum caliper size of new deciduous canopy trees installed shall be two and one-half inch (2½") caliper and the minimum size of new evergreen canopy trees installed shall be two inch (2") caliper.
- b. Understory or ornamental trees shall be at a density of five (5) trees for every one hundred linear feet (100 LF) of buffer, with a maximum spacing of twenty-five feet (25') between trees. Understory or ornamental trees shall be of a type expected to attain a height at maturity of not less than ten feet (10'). The minimum caliper size of new understory trees installed shall be one and one-quarter inch (11/4") caliper.

c. Type C buffers may include a wall, fence, earthen berm, planted vegetation, or any combination of the foregoing. If a fence or wall a minimum of six feet (6') in height is included, the required buffer width and the required number of understory plantings shall be reduced by one-half (½). If an earthen berm a minimum of four feet (4') in height is included, and the understory trees are planted on the berm, the required buffer width and the required number of understory trees shall be reduced by one-half (½). A side slope of an earthen berm may not exceed 3:1 unless stabilized with shrubs and/or ornamental grasses, and a side slope of an earthen berm that is stabilized with shrubs and/or ornamental grasses may not exceed 2:1.



## Perimeter Buffer Standards

Perimeter buffers shall conform to the following standards:

- 1. To the extent reasonably practicable, new plantings shall be evenly distributed throughout the buffer. In instances where planting in a row or rows is necessary to achieve the desired performance objective, trees shall be planted in staggered rows whenever practicable. In cases where the entire buffer width may not be needed to achieve the desired performance objective of the buffer type, as determined by the Planning Director, the remainder of the required buffer area should have a spacing of trees as required by the associated buffer type.
- 2. Buffer performance requirements should be achieved as soon as reasonably practicable (preferably no more than five (5) years).
- 3. In instances where planting requirement calculations produce a fraction, the fraction shall be rounded to the nearest whole number, with fractions of ½ or greater being rounded up and fractions of less than ½ being rounded down.

#### Location of Perimeter Buffers

Except as otherwise provided herein, the perimeter buffers and/or perimeter landscaped areas required by this Element shall be located along the applicable boundaries of the parcel.

## Land Use Change

A revised perimeter buffer plan, approved by the Planning Director, will be required if the land use class of a parcel changes to a land use class that requires a different buffer than required for the previous land use class.

# Section 3. Requirements for Streetscape Buffers and Street Trees Applicability

Except as otherwise provided herein, streetscape buffers of the width and buffer type described in Table 3.1 shall be provided along all of those publicly dedicated roads in Chatham Park described in Table 3.1. The types of roads in Table 3.1 are based on the description of roads shown on "Map 4: Highways" of the Town's Land Use Plan (a copy of which is included in the Master Plan and also is referred to herein as "Map 4"). If there is any question regarding the road type, it shall be determined by the Planning Director. The standards for Perimeter Buffers described in Section 2 of this Element are incorporated by reference in this Section 3 and are applicable to the corresponding Buffer Types in Table 3.1. Streetscape buffers may consist of existing vegetation, new landscaping material, or a combination of both. References in this Element to "planted trees", "planted vegetation", "plantings", or other similar reference include existing trees and other existing vegetation that comply with the standards of this Element.

Streetscape buffers shall be provided along the applicable types of roads depicted on Map 4 that are in or adjoin a boundary of Chatham Park, except that the type and location of one or more of the roads depicted on Map 4 may be modified by the Town by adoption of a revised or new Comprehensive Transportation Plan or by approval of one or more applicable Small Area Plans. An applicant may propose additional roads of any of the types described in Table 3.1 in any Small Area Plan and streetscape buffers shall be required on such roads included in any Small Area Plan approved by the Town.

A reduction or other variation in any streetscape buffer may be proposed on a development plan for Village Centers or other areas of intense urban development in Chatham Park, and may be approved by the Planning Director as an Administrative Alternative to the streetscape buffer requirements of this Element.

## Type and Width of Roadway Streetscape Buffers

All streetscape buffers shall be provided outside of the road right of way.

**Table 3.1** 

Type of Road	Buffer Width and Type (in Feet - ')
Freeway (e.g., US Highway 64 Bypass)	50' Type A adjacent to Non-Residential 50' Type A adjacent to Residential
Expressway and Boulevard	30' Type C adjacent to Non-Residential 30' Type B adjacent to Residential
Major Thoroughfare	0' adjacent to Non-Residential and all Residential other than detached single- family and duplexes 30' Type B adjacent to attached single- family Residential and duplexes
Minor Thoroughfare and All Other Streets	No Streetscape Buffer Required

#### *Notes to Table 3.1:*

- 1. Where a service road runs adjacent to any road that requires a streetscape buffer, the streetscape buffer shall be on the portion of the applicable lot that adjoins the service road right of way.
- 2. Streetscape buffer widths may be reduced by utilization of fences or walls in accordance with Section 8 of this Element entitled "Fences and Walls". All required vegetation shall be planted on the street side of the fence or wall.
- 3. Definitions of the road types in Table 3.1 are provided in Addendum 1 to this Element.

#### Street Trees

Except as otherwise provided herein, the North Carolina Complete Streets Planning and Design Guidelines will apply to public streets in Chatham Park. These Guidelines encourage the use of separations between traffic and pedestrians. To provide such separations in Chatham Park, except where prohibited by NCDOT on roads in or adjacent to Chatham Park under NCDOT control, street trees will be required in public street rights of way (excluding alleyways and fire lanes) between back of curb and sidewalks in order to provide for shade and additional separation from traffic.

#### 1. Medians

Except as prohibited by NCDOT on roads in or adjacent to Chatham Park under NCDOT control, medians that are eight feet (8) wide or wider shall be landscaped.

#### 2. Residential Streets

Along residential streets, one tree species should be used per street in order to create unity through the neighborhood. Changing species at intersections and on different streets is encouraged to avoid over-use of the same tree on long stretches of roadway and to reduce the potential for disease to impact large numbers of trees.

#### 3. Credit Against Streetscape Planting Requirements

Street trees shall be credited against all streetscape buffer planting requirements in this Element.

## 4. General Requirements

- a. Street trees shall be medium to large canopy trees, unless the use of other trees or shrubs is required due to conflicts with sight lines or utilities or governmental entity requirements.
- b. Street trees shall be placed not less than ten feet (10') from light poles and not less than twelve feet (12') from electrical transformers in order to allow these utilities to be safely serviced. Subject to applicable easement or governmental entity requirements, shrubs or trees other than canopy trees may be placed within five feet (5') of such devices.
- c. The number of street trees shall average not less than one tree for every fifty linear feet (50 LF) of road frontage of the applicable Lot, excluding the width of any driveway serving a Lot that is used for non-residential uses.
- d. Street trees shall be located to minimize conflict between other trees and utilities, roadways, sidewalks, sight distances, and street lights.

# Section 4. Buffer Averaging

Except for perimeter boundary transitions, buffer averaging may be used to satisfy buffer requirements if the following two conditions are satisfied:

1. No portion of the width of the buffer is less than one-half (½) of the width otherwise

- required by this Element for that type of buffer; and
- 2. The total area of the buffer (calculated in square feet or acreage) is equal to or greater than the total area would be if the entire buffer was the width required by this Element.

The exact amount of reduction of the width of the buffer shall be shown on the applicable development plan.

## Section 5. Improvements within Buffers

Unless otherwise explicitly allowed by this Element or any other Element, after buffers pursuant to this Element are established on or adjacent to a Lot, no improvements shall be constructed or placed in such buffers, except for any one or more of the following:

- 1. Cross-access easements or driveways between Parcels.
- 2. Sidewalks, greenways, street-side trails or multi-purpose paths, and public transit amenities;
- 3. Public and/or private utilities, including but not limited to, the following, and including lines, pipes, poles, and equipment and facilities necessary for the proper operation and functioning of a utility, including, without limitation: water; sewer; electric; natural gas; telephone; cable television; and internet; provided that, to the extent reasonably practicable:
  - a. they are located perpendicular to the buffer or at an angle of not less than seventy-five (75) degrees; or
  - b. they are located at an angle less than seventy-five (75) degrees and the area contained in the disturbed area is replaced with an equal amount of buffer area meeting the applicable buffer standard, in proximity to the disturbed area. Provided, however, the foregoing angle requirements are not applicable to public and private utilities that exist prior to development of the applicable parcel and are not applicable to public or private utility easements obtained through the power of eminent domain.
- 4. Stormwater Control Measures (individually, a "SCM", and together, "SCMs", also referred to as "Best Management Practices" or "SCMs" in the Master Plan and one or more of the Additional Elements) including, without limitation, constructed wetlands, bio-retention ponds, rain gardens, bio-swales or other SCMs planted with vegetation that meets the performance standards required of such SCMs and meets the applicable buffer standards of this Element. Such vegetation shall be credited against the requirements of this Element.

With the exception of the foregoing item no. 3.b., when improvements allowed by this Section are constructed or placed in a buffer established pursuant to the Element, there shall be no requirement that the improved area of the buffer be replaced elsewhere, except that, when such

improvements are in a streetscape buffer, to the extent practicable streetscape buffer planting shall be provided in accordance with the provisions of this Element.

## Section 6. Administrative Alternative to Buffer Planting Standards

The Planning Director may approve an Administrative Alternative to any planting standard for a buffer if the Planning Director determines, in accordance with established horticultural guidelines, that achieving the applicable buffer standard while maintaining existing healthy vegetation within the buffer may not be feasible due to one or more of the factors listed below, and that the intended standard will be achieved to the extent practicable if the Administrative Alternative is allowed:

- 1. type and conditions of significant vegetation remaining within the landscape area or buffer.
- 2. availability of sunlight;
- 3. dimension of required planting area;
- 4. separation between plants;
- 5. impact of installation of new plant material on root zones of any existing material;
- 6. topography;
- 7. proximity of man-made features such as utilities, buildings, sidewalks and retaining walls;
- 8. lack of reasonable availability of plant material in southeastern United States; and
- 9. other factors or conditions affecting plant growth and long-term health of the buffer or landscape area.

## Section 7. Vehicular Use Area Landscaping

#### Vehicular Use Area

A vehicular use area, or "VUA", is an area, other than a public or private street right of way or driveway, where motor vehicles are either parked, stored, or driven, including, parking lots, motor vehicle display lots, and motor vehicle rental depots, but not including alleyways, parking structures or buildings, underground areas, or areas which are used exclusively as loading areas or service areas.

#### VUA Planting Requirements (See Figure 7.1)

- 1. Canopy trees shall be utilized in VUAs to provide shade to impervious areas therein.
- 2. All on-site parking spaces shall be located within sixty feet (60') of a canopy tree and all trees used to meet the VUA landscaping requirements of this Element shall be located either in the VUA or not more than twenty feet (20') from the surface area of the VUA.
- 3. Existing trees and trees planted to meet other requirements of this Element or to meet requirements of the Tree Protection Plan Additional element may be applied to meeting the requirements of this Element. For example, perimeter buffer plantings, streetscape

buffer plantings, building foundation plantings, trees in tree coverage areas (as defined in the Tree Protection Plan Additional Element), and VUA island plantings, or any combination thereof, may be used to satisfy the VUA planting requirements of this Element.

- 4. All canopy trees used for meeting the VUA landscaping requirements of this Element shall be planted in not less than three hundred square feet (300 SF) of landscape area per tree, with the exception of Urban Environments as described in this Element.
- 5. If overhead utility lines are present and will not allow for installation of a canopy tree, two under-story trees (per approved plant list by applicable electric utility provider) shall be used instead.
- 6. SCMs meeting the foregoing planting requirements may be used to satisfy the canopy tree planting requirements in whole or in part.

## VUA Islands (See Figure 7.1)

#### 1. Perimeter islands.

- a. A perimeter island is an area that separates parking spaces in a VUA from a public or private street or primary internal access drive.
- b. A perimeter island must be a minimum of ten feet (10') wide.
- c. A perimeter island must be installed adjacent to at least one (1) side of each primary internal access drive, where practicable. Provided, however, a perimeter island is not required in either of the following instances:
  - (1) when a primary internal access drive is located in a parking lot that has less than 200 parking spaces; or
  - (2) when an interior island(s) separates a parking bay from a primary internal access drive and that drive is located adjacent to a building.
- d. A perimeter island also may serve as the location for a sidewalk. In such case, the sidewalk shall be a minimum of five feet (5') wide.

#### 2. Interior islands

- a. An interior island is an area inside a VUA that is at the end of a row of parking spaces or separates parking spaces. No more than thirty (30) parking spaces may be located between interior islands.
- b. An interior island must be a minimum of ten feet (10') in width and a minimum of three hundred square feet (300 SF) in area.
- c. All rows of parking must terminate with an interior island (which may include the end of a perimeter island).
- d. Notwithstanding the immediately preceding subsections a, b, and c, interior islands may be consolidated or expanded in order to preserve existing trees.

e. An interior island may be any shape, including, without limitation, rectangular, square, oval, or l-shaped (Figure 7.1).

#### 3. Median Islands

- a. A median island is an area that separates two (2) rows of parking spaces.
- b. A median island must be provided between a minimum of every three (3) bays of parking (6 individual rows of spaces).
- c. A median island must be a minimum of ten feet (10') wide.
- d. A median island also may serve as the location for a sidewalk connecting the parking and the use served by the parking area. The sidewalk must be a minimum of five feet (5') wide. If trees or shrubs are planted in the median, the median width must be expanded by not less than five feet (5').
- e. Notwithstanding the foregoing subsections a, b, c, and d, median islands may be consolidated or the number of parking bays or spaces between medians may be increased in order to preserve existing trees.

#### 4. Vehicular Use Area Screening (See Figure 7.1)

Where there is a vehicular use area adjacent to a public street right of way, an opaque screen meeting the requirements of this subsection 4 shall be provided between the common boundary of the right-of-way and the parking area of the vehicular use area. The screen may be located in and be a part of any applicable streetscape buffer and may be used in whole or in part to satisfy the requirements of that streetscape buffer in addition to satisfying the opaque screening requirements of this subsection 4. The opaque screen required by this subsection 4 may consist of trees, evergreen shrubs, ornamental grasses, earthen berms, fences, walls, or any combination thereof, which meet the following requirements:

- a. To the extent reasonably practicable and not inconsistent with this Element or applicable laws, ordinances, regulations, or other governmental entity requirements, the screen shall be continuous, occupying the full length of the parking area of the VUA adjacent to the street right of way, except for utility easements and except for sidewalks, driveways, and greenways that cut through the screen to connect the vehicular use area to streets and other properties. VUA screening within a sight distance triangle may be planted in accordance with Section 10 of this Element. To facilitate the health and growth of trees that constitute part of the screen, there may be breaks in the screen between trees and other types of screening materials; provided, the combined distance of such breaks along any one common boundary of the parking area portion of a vehicular use area and the adjacent street right of way at maturity shall not exceed ten percent (10%) of the total distance of the applicable screen. If shrubs are used, at the time of installation they shall be not less than two feet (2') in height above finished grade and be of a type expected not to exceed four feet (4') in height at maturity. If ornamental grasses are used, at the time of installation they shall not be less than one foot (1') in height above finished grade and be of a type expected not to exceed four feet (4'). Ornamental grasses shall be considered opaque for the purposes of the screening required by this subsection 4; provided, however, no more than 1/3 of the length of a screen along any one common boundary of the parking area portion of a vehicular use area and the adjacent street right of way shall consist of ornamental grasses.
- b. Earthen berms may be used or installed in lieu of or in addition to plantings. If necessary to satisfy the applicable screening standards, plant materials shall be installed which meet these standards. The installation of additional plant materials is encouraged so as to enhance the visual and aesthetic qualities of the screening. Plantings should be placed based upon topography of the site, usually at the top of the slope.
- c. A side slope of an earthen berm may not exceed a 3:1 slope unless stabilized with shrubs and/or ornamental grasses, and a side slope of an earthen berm that is stabilized with shrubs and/or ornamental grasses may not exceed a 2:1 slope.
- d. Walls shall be constructed to a minimum height of three feet (3)'.
- e. The plantings that satisfy the requirements of this subsection 4 may be maintained in a manner that promotes the health and growth thereof, even if such maintenance results

- from time to time in a reduction of the screen opacity.
- f. Exceptions for Underground Parking and Parking Structures: When parking is provided underground or within a building or a structure dedicated to parking or a portion of a building or structure dedicated to parking, the vehicular use area screening requirements shall not apply. Above ground parking structures shall be designed such that vehicles parked therein are not visible from public street rights of way.

(continued on next page)

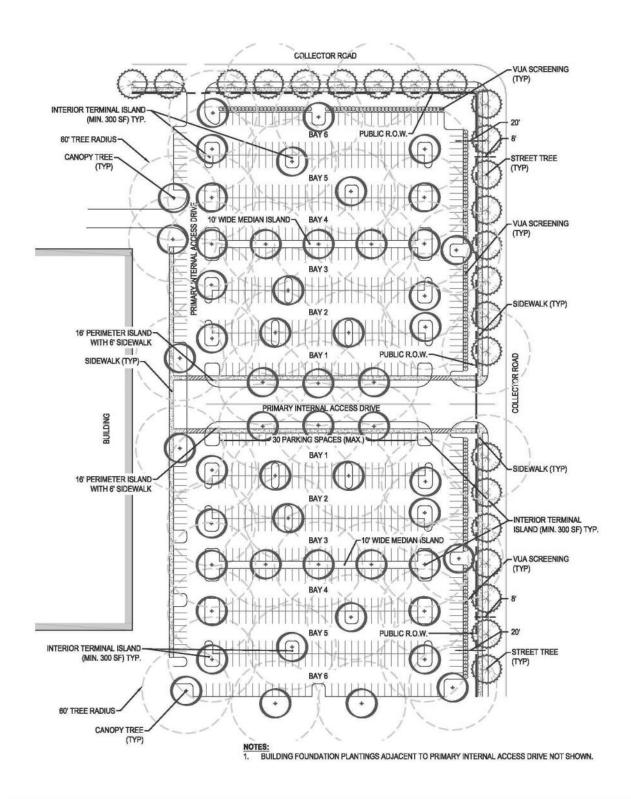


Figure 7.1

#### Section 8. Fences and Walls

Fences and walls that comply with the following standards and other applicable standards in this Element and other Elements are allowed in Chatham Park. For the purposes of this Section, "wall" or "walls" include, without limitation, free-standing walls, retaining walls, stormwater device walls, and other walls.

#### Fence and Wall Height Outside of Required Setbacks

Fences and walls located outside of the applicable front, rear and/or side yard setbacks may be erected to any height permitted for buildings in the applicable land use class.

#### Fence and Wall Height within Required Setbacks

Fences and walls located within a front, rear and/or side yard building setback shall not exceed eight feet (8') in height unless specifically approved as part of a buffer under applicable provisions of this Element. Provided, however, and notwithstanding the foregoing, fences and walls used on parcels with land uses described in Class 7 in Table 2.2 of this Element shall not exceed twelve feet (12') in height. Fences, walls, and other features addressed in this subsection shall be located outside of required sight distance triangles.

#### **Materials**

- Except as otherwise provided in this Element, fences and walls shall be constructed
  of wood, stone, rock, brick, decorative concrete, wrought iron, reinforced soil (or
  products created to resemble these materials), or a combination of any of these
  materials.
- 2. Materials such as, but not limited to, plywood, particleboard, sheet metal, and concrete barriers shall not be used for fencing or for walls.
- 3. Chain link fencing may be used on parcels with non-residential land uses and shall be coated in black, brown or dark green vinyl. Provided, however, and notwithstanding the foregoing, vinyl coating is not required on chain link fencing used on parcels with manufacturing, industrial, transportation, warehouse, utility land uses described in Class 7 in Table 2.2 of this Element, or for any other public utility purposes. As used in this Element, "other public utility purposes" include potable water, sanitary sewer, reuse water, electricity, natural gas, telephone, cable television, internet, and other utility services provided to the public, whether owned or operated by a governmental entity or private utility provider.
- 4. On parcels with residential land uses (but excluding parcels used for active or passive recreation in residential use developments and parcels in residential use developments used temporarily for construction office and/or storage of construction materials), chain link fencing is allowed only in the side and/or rear yards of individual parcels and is not allowed to be used by the developer of a subdivision for buffering and screening. Provided, however, and notwithstanding the foregoing, chain link fencing may be used anywhere on parcels within residential use developments that are used for passive or

active recreation, construction offices or storage of construction materials during development of the residential use development or construction of dwellings in the residential use development. All chain link fencing used on parcels with residential land uses and on parcels within residential developments used for recreation or construction purposes, shall be vinyl coated in black, brown or dark green.

#### Landscaping and Screening of Fences and Walls

Fences and walls located within thirty feet (30') of any public street right of way, except for stormwater device walls, shall meet the following landscape requirements:

5. One (1) shrub/ornamental grass shall be installed for each five linear feet (5 LF) of fence or wall. Shrubs shall be a minimum of eighteen (18) inches tall at time of installation and ornamental grass shall be a minimum of twelve (12) inches tall at the time of installation. Seventy-five percent (75%) of the plant material shall be evergreen. Shrubs may be installed in a staggered, clustered, grouped, or linear fashion, and all plantings required by this subsection shall be installed on the side of the fence or wall that faces the right-of-way.

#### Maintenance of Fences and Walls

The owner of a parcel on which a fence or wall is located and any other person responsible for maintenance of the fence or wall shall maintain the fence or wall in a safe and attractive condition and in a good state of repair at all times, including, without limitation, all of the following:

- 1. Repair or replacement of surface area that is damaged, disfigured, cracked, ripped, has peeling paint, or has missing portions;
- 2. Repair or replacement of bent or broken supports, including loose or missing appendages;
- 3. Install and maintain fences and walls plumb (vertical) to the ground.

All of the foregoing repair and replacement shall be done as soon as reasonably practicable after the damage or condition occurs.

#### **Exposed Framing**

Fences and walls on parcels in Chatham Park PDD that face a public street right-of-way, an adjoining parcel in Chatham Park PDD, or property located outside of Chatham Park PDD shall be constructed such that the finished side of the fence or wall faces the public street right-of-way, adjoining parcel in Chatham Park PDD, or property located outside of Chatham Park PDD and the unfinished side of the fence or wall faces toward the parcel in Chatham Park PDD on which the fence or wall is located.

#### Fences and Walls within Buffers

Fences and walls in buffers shall be installed, to the extent reasonably practicable, so as to not disturb or damage existing vegetation protected under the Tree Protection Plan Additional Element or existing installed plant material that has been installed pursuant to this Element. Provided, however, existing plant material that has been installed pursuant to this Element may be removed and replaced with new plant material, that satisfies the requirements of this Element or relocated in a manner that satisfies the requirements of this Element.

### Setback Requirement

To allow sufficient room for plantings required by this Element to mature, fences and walls located within thirty feet (30') of an adjacent public street right-of-way shall be installed a minimum of five feet (5') from the lot line. There shall be no setback from a lot line required for fences not located adjacent to a public street right-of-way.

### Fences Prohibited

Fences that are electrically charged and those constructed of barbed or razor wire shall be prohibited, except for such fences that serve a public or quasi-public purpose relating to public safety or security, and except for electric fences that are used to confine animals within the area surrounded by the fence (including underground electric fences for household pets).

# Sight Distance

No fence or wall that obstructs sight distance triangles shall be constructed, installed, or allowed to remain.

#### **Buffer Width**

Except for perimeter boundary transitions, the portion of any other buffer required by this Element in which a fence or wall meeting the requirements of this Section of this Element is installed may be reduced in width by one-half ( $\frac{1}{2}$ ) of the width otherwise required if the following two conditions are satisfied with respect to the fence or wall:

- 1. The fence or wall is constructed in such a manner that the view from one side of the fence to the other side of the fence up to a height of six feet (6') is completely or substantially obstructed; and
- 2. The fence or wall is not less than six feet (6') in height measured from the surface of the ground on which the fence or wall is located.

The exact amount of reduction of the width of the buffer shall be shown on the applicable development plan.

# Section 9: Screening

#### **Stormwater Devices**

SCMs shall be landscaped to provide transitions between SCMs and adjoining parcels, except where landscaping would interfere with BMP operation or maintenance. Culverts and other structures and devices associated with SCMs generally shall be landscaped to reduce their visual impacts, except where landscaping is impracticable. All proposed landscaping shall be shown on the applicable development plan.

Where used, visible hardscape transitions shall be subject to the following criteria:

- 1. The exposed surface of the wall of a BMP structure shall consist of decorative material such as segmented block (that includes or appears as a variety of individual block sizes and a blend of colors), stone, or brick. Where visibility from a public street right of way is limited, other modular designs may be used. Poured-in-place concrete walls shall not be used for SCMs unless veneered with segmented block (that includes a variety of individual block sizes and a blend of colors), stone, or brick, or qualify as a "public art" or "other art" under the Master Public Art Plan Additional Element.
- 2. The stormwater device shall be located and designed such that it is accessible to the public and intended to serve as an aesthetic amenity to the site. The device shall be incorporated into or located in immediate proximity to pedestrian plazas or other active areas of the site.
- 3. The design of a BMP wall shall be tiered in order to accommodate plantings to soften the mass of the upper half of the wall height. Wall tiers shall not exceed six feet (6') in height and three feet (3') in depth. Draping plant material planted at the top of the wall may be used in circumstances in which the wall height is limited and a tiered structure is not utilized.

### Mechanical and Utility Equipment

- 1. Heating, ventilation, air conditioning, and other mechanical and utility equipment, including but not limited to hoses, pipes, vents, fans, compressors, pumps, and heating and cooling units, ground based electrical transformers, telephone, or cable junction boxes, which are located on, beside, or adjacent to any building, shall be screened from the view of public streets and adjacent parcels.
- 2. The screen shall exceed the height of the equipment at the time of maturity, shall not interfere with the operation of or access to the equipment, and shall use building materials and design which are compatible with those used for the exterior of the principal building or vegetative materials or a combination thereof.
- Utility equipment and facilities associated with on-site electric, cable, telephone, gas or other similar utility, including ground-based electrical transformers and power meters, shall be placed, to the extent reasonably practicable, in service areas on the sides or rear

- of buildings, and shall be screened, to the extent reasonably practicable, with evergreen plantings or other materials approved by the applicable utility provider.
- 4. Provided, however, the screening requirements of this subsection are not applicable to detached single-family residential Lots.

#### Trash Containment Areas

Parcel owners must account for disposal of trash, including trash and recycling containment devices. Development plans for restaurants, large retail establishments, and other similar businesses must describe how recycling is to be handled. Except when placed in or near a street or drive for pick-up by the applicable collection entity, all trash containment devices, including compactors, dumpsters, and recycling containers, shall be located and/or screened so as not to be visible from public street rights of ways and adjacent parcels. The type of screening used shall be determined based on the proposed location of the trash containment area, existing site conditions, and the type and amount of existing and proposed vegetation on the site. The standards in the following items 1 through 7 apply to all parcels used for non-residential land uses and to all parcels used for residential land uses that have the particular trash collection and containment facilities and/or recycling facilities described in those items.

- 1. All trash containment areas shall be enclosed with solid gates to allow for access and security and contain windblown litter. In addition, the Planning Director may require self-closing gates for such enclosures. Gates must be maintained in good working order.
- 2. The enclosure shall be not less than eight feet (8') tall or two feet (2') taller than the highest point of the compactor or dumpster, whichever is greater.
- 3. The enclosure shall be made of a material that is opaque at the time of installation and compatible with the design and materials of the principal building. The material shall be masonry or other material that matches the building material or provides for a superior visual alternate. Wood and other similar materials may be used for gates.
- 4. All compactors and dumpsters shall be placed on a concrete pad that is large enough to provide adequate support for the compactor or dumpster and for the service vehicle that empties the compactor or dumpster, and which allows for positive drainage.
  - 5. The enclosure shall be kept free of litter, debris, and residue.
  - 6. The dumpster or compactor shall be accessible to the handicapped.
- 7. Roll out carts used for trash or recycling with non-residential land uses shall be a neutral or earth tone color or other cart color required by the applicable service provider, and shall be removed from public view except when placed out for trash or recycling pick-up on applicable trash or recycling pick-up days.

### Foundation Landscaping

- 1. Foundation landscaping is required for all buildings requiring site plan approval, except for those in Urban Environments (i.e., Village Centers and Section 7.1).
- 2. Location Foundation landscaping areas shall be located: (i) adjacent to the

- building; or, (ii) so as to begin within twelve feet (12') of the building (in the case of a walkway which runs adjacent to the building). Foundation landscaping shall be planted along the portions of the building foundation that adjoin a public right of way or parking areas for use by the general public.
- 3. Type of Landscaping Foundation landscaping areas shall be landscaped with trees or shrubs/hedge plants and grasses, with a minimum of 50% of the trees and shrubs/hedge plants consisting of evergreen plant material.
- 4. Minimum Dimension of Foundation Landscaping Foundation landscaping areas shall maintain a minimum depth in the smallest dimension of three feet (3') and shall be planted along not less than fifty percent (50%) of the length of the applicable foundation wall.

# Section 10: Planting Standards & Materials

# **General Specifications**

These general specifications apply to vegetation planted pursuant to this Element, unless otherwise specifically provided in this Element. The size standards in these general specifications apply at time of installation. Height minimums are the distance above ground level and caliper minimums are measured in accordance with the current standards of the American Standards for Nursery Stock.

- 1. Canopy trees of any classification shall not be less than ten feet (10') in height with a minimum two-and-a half inch ( $2\frac{1}{2}$ ") caliper.
- 2. Understory trees of any classification shall not be less than six feet (6') in height with a minimum of one and a quarter inch (1<sup>1</sup>/<sub>4</sub>") caliper. Provided, however, and notwithstanding the foregoing, a multi-stemmed tree may be used as an understory tree if it is not less than eight feet (8') in height and has not less than three (3) stems.
- 3. Shrubs shall be not less than three (3) gallons in container size, have a minimum height of eighteen inches (18") and have a minimum spread of twelve inches (12") to fifteen inches (15").
- 4. Ornamental grass shall be not less than one (1) gallon in container size and have a minimum height of twelve inches (12").
- 5. Groundcovers shall be a minimum of one-and-a-half inch  $(1\frac{1}{2})$  pots with a minimum spread of four inches (4).

### Species - Prohibited

There shall be no invasive/exotic plants of the Southeast, as identified by North Carolina State University Cooperative Extension, installed in Chatham Park.

### Species - Drought Tolerant

1. To the extent reasonably practicable, new plant material shall complement existing

vegetation native to the site. The use of drought tolerant, indigenous, native, wildlife friendly, and/or adaptive locally grown species of trees, shrubs and groundcovers shall be utilized in order to make planted areas compatible with existing native habitats and to reduce dependency on irrigation.

2. Non-drought tolerant plants are acceptable to use in naturally wet areas, bio-retention areas, or if an alternative to publicly supplied water for irrigation of such plants is used.

### Species - Pollinator

To the extent reasonably practicable, new plant material shall include pollinator friendly trees, shrubs, and ground covers, and must be indicated as such where plant information is provided on planting plans.

# Species - Diversity

To reduce risks of future blight conditions, except for plans for street trees and streetscape buffers, individual development plans shall not be approved with more than 33% of one species of tree.

# **Plant Quality**

Plant materials shall be nursery grown and shall be healthy and vigorous, free from defects, decay, encircling roots, sunscald, injuries, abrasions, diseases, insects, pests, and all forms of infestations or objectionable disfigurements.

# Sight Distance and Public Safety

- 1. Landscaping flanking a driveway entrance and landscaped areas within or adjacent to a street right-of-way must not interfere with vehicular sight lines.
- 2. Plants located at the end of parking lot islands, within sight distance triangles, or in medians shall be a species with a maximum mature height of 30 inches.
- 3. Trees planted within public rights-of-way or adjacent to site distance triangles shall be limbed up to a minimum height of six feet (6').

# **Existing Vegetation**

Existing vegetation in a TCA may be applied toward satisfaction of any of the requirements of this Element, and any additional plantings necessary to satisfy the buffer requirements of this Element may be placed in or adjacent to the TCA. Provided, however, a TCA area along the perimeter boundary of a parcel that is one hundred feet (100') or more in width shall satisfy the applicable requirements (e.g., perimeter buffer, streetscape buffer, street trees) of this Element without any additional plantings.

Existing vegetation may be applied toward satisfaction of perimeter buffer requirements, perimeter transition requirements, and streetscape buffer requirements as provided in the Sections of this Element applicable to those buffers and transitions.

When existing vegetation is to be applied toward satisfaction of any of the requirements of this Element, it shall be shown on the applicable development plan, together with a written general description of such existing vegetation, including species, varieties, and sizes, predominant natural communities, and understory characteristics (where applicable). Field surveys of individual trees and/or shrubs shall not be required for existing vegetation to be applied toward satisfaction of the requirements of this Element. Prior to the issuance of a CO (as defined in this Element), the Planning Director may require supplemental plantings to satisfy the requirements of this Element when field determination reveals deficiencies in the quantity, quality, or type of the existing vegetation.

# Tree Plantings in Urban Environments

For the purposes of this Element, the term "Urban Environments" means any part or all of an Activity Center, a Village Center, or Section 7.1. In lieu of satisfying the other standards of this Element, trees planted in Urban Environments may be planted in accordance with the following standards to satisfy the requirements of this Element.

#### 1. Tree Grates

When utilized, tree grates shall meet the following requirements:

- a. Tree grates shall comply with the Americans with Disabilities Act of 1990 (as amended).
- b. Tree grates shall provide for tree trunk expansion, such as pop out concentric rings in the grate around the trunk.

### 2. Tree Planting Area

A tree planting area (or "tree pit") is the immediate area in which a tree is planted. The minimum width of a tree planting area shall be not less than twice the diameter of the tree's root ball, measured along the top of the root ball, and the minimum depth shall not be less than the depth of the tree's root ball. Utility lines and other utility facilities are not allowed within a tree pit, except for low voltage electric lines, irrigation lines, and SCMs. A tree shall be planted as near to the center of a tree pit as reasonably practicable. Backfill within the tree pit shall consist of high quality, minimally compacted topsoil or, if the tree pit also is serving as part or all of a BMP, a Town approved alternative (for example, a high flow media for stormwater treatment). Drainage shall be provided.

### 3. Required Subsurface Root Expansion.

The following standards are required only in Village Centers.

A "subsurface root expansion zone" is a growth area in and around a tree pit. A subsurface root expansion zone shall comply with the following standards, which may be met with a combination of the following standards allowed by this Element; provided, however, soil utilized in the tree pit shall comply with the standards in the immediately preceding subsection 2:

a. A minimum of six hundred cubic feet (600 CF)of subsurface root expansion area per tree shall be provided.

- b. High quality, minimally compacted topsoil or one of the design alternatives described herein shall be utilized in the subsurface root expansion zone and shall provide a continuous, connected volume of soil accessible to tree roots.
- c. Maximum depth of a subsurface root expansion zone is ten feet (10').
- d. Allowed design alternatives for a subsurface root expansion zone shall include, without limitation, any one or more of the following:
  - (i) Structural soil;
  - (ii) A minimum of six (6) root expansion paths from each tree, with a connection to one or more adjacent tree pit root paths; provided, the total number of cubic feet of subsurface root expansion zone, including the cubic feet occupied by the root paths, shall not be less than 600 x the number of trees connected by the root paths;
  - (iii) Other media comparable to high quality topsoil as certified by a licensed landscape architect or licensed landscape contractor.
- e. When root expansion paths extend under streets, sidewalks, or other paved surfaces, suspended pavement design and soil compaction requirements shall be determined by a licensed geotechnical engineer or other qualified professional.

Utility lines and other utility facilities including, without limitation, SCMs, are allowed within subsurface root expansion zones.

# Section 11. Plans and Installation; Performance Guaranty

- 1. A planting plan for new plantings, major changes to existing vegetation, and areas of existing vegetation proposed to be used to satisfy the requirements of this Element, prepared and sealed by a Landscape Architect or other qualified design professional, shall be included with the applicable development plan. Vegetation in addition to those necessary to satisfy the requirements of this Element may be planted on any Lot.
- 2. Prior to issuance of a certificate of occupancy the Planning Director shall determine which existing vegetation proposed by the planting plan to be used to satisfy the requirements of this Element qualifies to satisfy the requirements of this Element. To the extent that such proposed existing vegetation does not satisfy the requirements of this Element, additional vegetation shall be planted that, together with the existing vegetation, will satisfy the requirements of this Element.
- 3. Warm season grasses shall be planted in grassed areas within all public street rights of way in Chatham Park. A ground cover of native and wildlife-friendly grasses and

- wildflowers is required for open, unimproved, and non-grassed areas in public street rights of way in Chatham Park.
- 4. All landscaping required by this Element to be installed on a Lot or in a street right of way or driveway adjoining a Lot (but excluding landscaping in medians in public street rights of way, which shall be installed prior to acceptance of the maintenance obligation for the street by the Town or other governmental entity), shall be installed prior to the issuance of a certificate of occupancy (or other document required by Town ordinances prior to occupancy or commencement of use of the improvements on the Lot, any and all such documents being included in the term "certificate of occupancy", also referred to herein as "CO"). If the owner of the Lot desires to postpone installation of landscaping because seasons and weather conditions are not appropriate for the installation of landscaping immediately prior to issuance of a CO, but does not desire to have issuance of a CO delayed until installation of the landscaping is completed, a performance bond, irrevocable letter of credit, cash deposit, or other surety acceptable to the Town, or some combination thereof, (all of the foregoing, individually or together, being referred to herein as "financial security") may be provided by the owner as provided herein. All landscaping required by this Element covered by the financial security shall be installed within the first three (3) months of the next planting season after the use of the lot is commenced (the "Final Completion Date"). For good cause shown, the Planning Director may grant one (1) or more extensions of the Final Completion Date for a total period of time not to exceed one (1) year. The months of June, July and August are considered seasons or weather conditions which are not appropriate for the installation of landscaping, unless an adequate irrigation system is installed and operated as part of the landscape plan.

When the required financial security is provided and all other requirements for issuance of a CO have been satisfied, the Town shall issue the CO, even though all required landscaping has not yet been installed. The financial security shall be accompanied by documentation of the estimated cost of the remaining landscaping to be installed. The documentation of estimated cost may consist of a landscaping contractor's bid or contract, a bill from a plant or landscaping nursery, or similar document. The financial security shall be for an amount equal to one and one-quarter (1½) times the cost of the plant materials plus installation for the plant materials yet to be installed, based upon the highest estimate provided (the "Required Amount"). The various forms of financial security are subject to the following requirements:

1. Performance Bond. A performance bond shall: (1) Be issued for the benefit of the Town, with the Planning Director as the authorized agent for the Town; (2) Be in the Required Amount; (3) Be in effect until installation of the landscaping secured by the performance bond is completed in accordance with the requirements of this Element and the Planning Director has executed a written release of the performance bond; and (4) Be issued in a form approved by the Town.

- 2. Irrevocable Letter of Credit. An irrevocable letter of credit ("LOC") shall: (1) Be issued for the benefit of the Town, with the Planning Director as the authorized agent for the Town; (2) Be in the Required Amount; (3) Be in effect until installation of the landscaping secured by the LOC is completed in accordance with the requirements of this Element and the Planning Director has executed a written release of the LOC; (4) Be issued in a form approved by the Town; and (5) Be issued by a financial institution that shall allow for presentment upon default at a location within 25 miles of the corporate limits of the Town.
- 3. Cash Deposit. A cash deposit or other instrument readily convertible to cash at face value (both of which are included in the term "cash deposit") shall (1) Be deposited with the Town and held by the Town in a separate, interest bearing account, and all interest earned on the cash deposit shall become part of the cash deposit; (2) Be in the Required Amount; and (3) Be held by the Town until installation of the landscaping secured by the cash deposit is completed in accordance with the requirements of this Element and the Planning Director has executed a written release, at which time the cash deposit shall be disbursed by the Town to the person who made the cash deposit.

In the event that the Town draws on a performance bond or LOC, or uses a cash deposit to complete the landscaping required by this Element, the balance, if any, remaining after completion of the landscaping shall be disbursed by the Town to the person who provided the financial security. The Planning Director may authorize reduction in the amount of any performance bond or LOC, or release of portions of a cash deposit, as the improvements secured by the applicable financial security are completed.

Landscaping associated with improvements or a circumstance or other condition for which no CO is required (for example, landscaping in medians in street rights of way and landscaping on or adjacent to common areas in a residential subdivision) shall be completed, as applicable, prior to acceptance of the maintenance obligation for the improvements by the Town or other governmental entity (for example, acceptance of the maintenance obligation for the street that contains a landscaped median) or prior to issuance of a CO for the first Lot associated with such improvements (for example, a CO for the first house constructed in a residential subdivision). Financial security for landscaping described in this paragraph may be provided in the same manner as financial security for other required landscaping.

### Section 12. Definitions

### Buffer

A portion of property designated to mitigate impacts between land uses or transportation routes, or to protect water features from pollutants.

# Caliper

The diameter of a tree measured in accordance with the current standards of the American Standards for Nursery Stock.

# **Canopy Tree**

A large tree expected to grow to thirty feet (30') or more in height at maturity, usually deciduous, that is planted to provide canopy cover shade.

# **Drought Tolerant Vegetation**

A species of plant able to survive with naturally occurring rain events typical to the area.

### **High Quality Topsoil**

Topsoil that includes not less than three percent (3.0%) organic material by volume. Existing topsoil may be used if it meets this requirement or is supplemented with sufficient organic material to meet this requirement.

### **Native Vegetation**

Vegetation that is both native and grows locally. For example, longleaf pines are native to North Carolina, but they are not locally expected in the mountains, just as mountain laurel is not locally expected in coastal areas.

#### NCDOT or DOT

The North Carolina Department of Transportation.

### **Pollinator**

An insect or animal such as bees, butterflies, birds, bats, moths, and beetles, that transport pollen from one plant to another.

### **Primary Internal Access Drive**

A driveway that connects a vehicular use area to a public street right of way.

### **Residential Street**

A street serving residential land uses, generally designed to carry low volumes of vehicular traffic at low speeds within residential areas.

### **Street Tree**

A canopy tree within or adjacent to a street right of way and planted to the specifications of this Element.

### **Structural Soil**

A medium that can be compacted to pavement design and installation requirements while permitting root growth. It is a mixture of gap-graded gravels (made of crushed stone), clay loam, or other materials of equivalent functionality and a hydrogel stabilizing agent to keep the mixture from separating. It provides an integrated, root penetrable, high strength pavement support system.

# **Tree Grate**

Devices designed to protect tree roots, manage stormwater and maintain neat, orderly and safe sidewalks.

# **Understory Tree**

A tree expected to reach a maximum height of twenty-five feet (25') at maturity.

# Wildlife-friendly plants

Plants and other vegetation that benefit native wildlife by providing food and habitat.

# Section 13. Landscape Resources

Pollinator Plants - https://www.growingsmallfarms.ces.ncsu.edu/growingsmallfarms-pollinatorconservation/

Native Plants <a href="http://www.ncwildflower.org">http://www.ncwildflower.org</a>

http://www.nc.audobon.org http://www.ncbg.unc.edu/

Wildflowers and Native Plants - http://www.ncwildflower.org/native\_plants/recommendations

Drought Tolerant Plants http://www.ncbg.unc.edu/native-southeastern-plants/

http://www.ncwildflower.org/native\_plants/recommendations

http://www.plantnative.org/rpl-ncsc.htm

https://www.wildflower.org/plants/combo.php?start=0&distribution=NC&fromsearch=true1&pagecount=100

Wildlife Friendly Plants <a href="http://www.audubon.org/news/10-plants-bird-friendly-yard">http://www.audubon.org/news/10-plants-bird-friendly-yard</a>

https://www.nwf.org/garden

# ADDENDUM 1 DEFINITIONS OF ROAD TYPES IN TABLE 3.1

The following definitions are from the Town of Pittsboro Comprehensive Transportation Plan.

"NCDOT" = North Carolina Department of Transportation

"HOV" = High Occupancy Vehicles

"HOT" = High Occupancy Transit

"ROW" = Right of Way

### **Freeways**

- 1. Functional purpose high mobility, high volume, high speed
- 2. Posted speed 55 mph or greater.
- 3. Cross section minimum four lanes with continuous median.
- 4. Multi-modal elements HOV/HOT lanes, busways, truck lanes, park-and-ride facilities at/near interchanges, adjacent shared use paths (separate from roadway and outside of ROW).
- 5. Type of access control full control of access.
- 6. Access management interchange spacing (urban one mile; non-urban three miles); at interchanges on the intersecting roadway, full control of access for 1,000 feet or for 350 feet plus 650 foot island or median; use of frontage roads, rear service roads.
- 7. Intersecting facilities interchange or grade separation (no signals or at-grade intersections).
- 8. Driveways not allowed.

# **Expressways**

- 1. Functional purpose high mobility, high volume, medium-high speed.
- 2. Posted speed 45 to 60 mph.
- 3. Cross section minimum four lanes with median.
- 4. Multi-modal elements HOV lanes, busways, very wide paved shoulders (rural), shared use paths (separate from roadway but within ROW)
- 5. Type of access control limited or partial control of access.
- 6. Access management minimum interchange/intersection spacing 2,000 feet; median breaks only at intersections with minor roadways or to permit U-turns; use of frontage roads, rear service roads; driveways limited in location and number; use of acceleration/deceleration or right turning lanes.
- 7. Intersecting facilities interchange; at-grade intersection for minor roadways; right-in/right-out and/or left-over or grade separation (no signalization for through traffic).
- 8. Driveways right-in/right-out only; direct driveway access via service roads or other alternate connections.

#### **Boulevards**

- 1. Functional purpose moderate mobility; moderate access, moderate volume, medium speed.
- 2. Posted speed 30 to 55 mph.
- 3. Cross section two or more lanes with median (median breaks allowed for U-turns per current NCDOT Driveway Manual.
- 4. Multi-modal elements bus stops, bike lanes (urban) or wide paved shoulders (rural), sidewalks (urban local government option).
- 5. Type of access control limited control of access, partial control of access, or no control of

access.

- 6. Access management two lane facilities may have medians with crossovers, medians with turning pockets or turning lanes; use of acceleration/deceleration or right turning lanes is optional; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged.
- 7. Intersecting facilities at grade intersections and driveways; interchanges at special locations with high volumes.
- 8. Driveways primarily right-in/right-out, some right-in/right-out in combination with median leftovers; major driveways may be full movement when access is not possible using an alternate roadway.

# **Major Thoroughfares**

- 1. Functional purpose balanced mobility and access, moderate volume, low to medium speed.
- 2. Posted speed 25 to 55 mph.
- 3. Cross section four or more lanes without median (US and NC routes may have less than four lanes).
- 4. Multi-modal elements bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban).
- 5. Type of access control no control of access.
- 6. Access management continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged.
- 7. Intersecting facilities intersections and driveways.
- 8. Driveways full movement on two lane roadway with center turn lane as permitted by the current NCDOT Driveway Manual.

#### **Minor Thoroughfares**

- 1. Functional purpose -balanced mobility and access, moderate volume, low to medium speed.
- 2. Posted speed 25 to 55 mph.
- 3. Cross section ultimately three lanes (no more than one lane per direction) or less without median.
- 4. Multi-modal elements bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban).
- 5. ROW no control of access.
- 6. Access management continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged.
- 7. Intersecting facilities intersections and driveways.
- 8. Driveways full movement on two lane with center turn lane as permitted by the current NCDOT Driveway Manual.

# 5. Stormwater Element

# Section 1. Purpose & Applicability

Note regarding conflicts with existing references: All references, terms, and definitions mentioned in this Element refer specifically to Chatham Park unless otherwise specifically noted. Example: "Design Manual" in this Element refers to the Chatham Park Stormwater Design Manual. If the intent is to reference the Town of Pittsboro Design Manual, the full name will be used.

#### Introduction:

This is the Master Stormwater Manual Additional Element for Chatham Park Planned Development District (also referred to herein as "Stormwater Element" or "Element"). Quoting from the Master Plan:

"Stormwater control measures, stormwater systems, and stormwater treatment practices (together, 'Best Management Practices' or 'BMPs') for new development in the *Chatham Park* will be designed to meet the following standards (subject to and/or utilizing variances and/or lesser standards and/or offset payments that may be granted, adopted or accepted by the Town or other applicable governmental entity):

- 1. Control and treat the runoff generated from all surfaces by one inch (1") of rainfall.
- 2. Limit nitrogen and phosphorous loads not to exceed 3.8 pounds per acre per year for nitrogen and 1.43 pounds per acre per year for phosphorous.
- 3. Have a minimum of 85% average annual removal for Total Suspended Solids.<sup>1</sup>
- 4. Control post development stormwater runoff rates so that there is no increase in peak flow rates from the pre-development condition for the one (1) year, two (2) year, five (5) year and ten (10) year 24 hour storm events for that site. For regional BMPs, there shall be no increase in flow rates from the pre-development conditions from the contributing watershed for the same storm events. All analyses shall be based on full buildout conditions within the site or watershed.
- 5. Standards specified above are established as minimum standards."

For the purposes of this Element and all other Additional Elements:

a. BMPs also may be referred to as "Stormwater Control Measures" (individually and together, 'SCM' or "SCMs"); and

<sup>&</sup>lt;sup>1</sup> Subsequent to approval of the Master Plan, NCDEQ modified its requirements with respect to removal of 85% of the Total Suspended Solids by referring to Primary SCMs.

b. In the fourth line of #4 above, the words "contributing watershed" are changed to "contributing sub-watershed". For such purposes, the term contributing sub-watershed refers to the sub-watershed in which the applicable development site is located.

In accordance with the Master Plan, the foregoing standards may be achieved through construction or installation and operation of any SCMs or combination of SCMs allowed by this Element, and may be achieved by SCMs that serve individual parcels, SCMs that serve multiple parcels, or by combinations of SCMs that serve individual parcels and multiple parcels. This Element provides further details as to how the foregoing standards may be achieved in Chatham Park.

References in this Element to departments or agencies of the State of North Carolina are intended to refer to the applicable department or agency, regardless of the name by which it is known.

### Purpose:

The Master Plan committed to deliver a community of exceptional design and quality that protects critical environmental resources. To that end, this Element is designed to meet the Master Plan's commitment to watershed stewardship using the following means:

- 1. Outlining the administrative relationship between the Stormwater Program Manager for Chatham Park and the Town Stormwater Administrator<sup>2</sup>;
- 2. Defining the Chatham Park stormwater plan submittal and internal review process;
- 3. Establishing a sustainable program for long term operation and maintenance of SCMs in Chatham Park;
- 4. Developing a set of requirements to ensure that Chatham Park complies with applicable Chatham Park, Town, State, and Federal stormwater regulations;
- 5. Encouraging the use of non-structural stormwater devices and green infrastructure to protect watershed health; and
- 6. Establishing an evaluation process for development to determine compliance with the Stormwater Standards in both high and low density development areas.

### Authority:

In accordance with the Town's planned development district zoning ordinance and the Master Plan, this Element provides additional detail on the handling of stormwater, maintenance of stormwater control measures, and management of the Chatham Park stormwater compliance program.

### Applicability:

The Stormwater Standards apply to all development and redevelopment within Chatham Park.

<sup>&</sup>lt;sup>2</sup> The "Town Stormwater Administrator" (who also may be referred to herein as the "Stormwater Administrator" is the person designated by the Town to enforce the provisions of this Element.

### Critical Environmental Resources:

For the purposes of this Element, critical environmental resources are the following:

- perennial and intermittent streams
- U.S. Army Corps of Engineers jurisdictional wetlands
- U.S. Army Corps of Engineers jurisdictional waterbodies
- Federal Emergency Management Agency Special Flood Hazard Areas and Future Conditions 1% Annual Chance Flood Hazard as identified in the current Flood Insurance Study and effective National Flood Insurance Program map panels, including Letters of Map Revision, Conditional Letters of Map Revision, Letters of Map Amendment, and Letters of Map Revision Based on fill, and other map changes approved by the National Flood Insurance Program after initial publication of the applicable map panels
- regulated buffers and additional buffers<sup>3</sup>
- tree canopy, in accordance with the Exceptional Design Evaluation (as defined in this Element)

### Section 2: Administration:

Chatham Park Investors LLC ("CPI") or its assignee or designee shall designate a Stormwater Program Manager to administer the Stormwater Standards in Chatham Park. The Stormwater Program Manager shall be a registered professional engineer or landscape architect licensed in the State of North Carolina, with specific knowledge of North Carolina stormwater practices, policies, and regulations. The Stormwater Program Manager for Chatham Park shall oversee implementation of all components of watershed protection and stormwater management in Chatham Park in accordance with the standards contained in the Master Plan, this Element, the Design Manual, and applicable Town, State, and Federal stormwater regulations (together, the "Stormwater Standards"). Services provided by the Stormwater Program Manager may be paid for by one or more of the following: the applicant requesting approval of a development plan; fees charged by the Development Review Committee for Chatham Park; assessments collected by the property owners association(s) in Chatham Park that is/are responsible for maintenance of SCMs (referred to herein individually and together as the "POA"); any other method provided for in applicable restrictive covenants. Prior to submission of a development plan to the Town, the Stormwater Program Manager shall review the development plan to determine its compliance with the Stormwater Standards and require revisions to that development plan as necessary for compliance with the Stormwater Standards.

The Stormwater Program Manager may delegate any or all of the roles and responsibilities of the Stormwater Program Manager described in this Element to one or more Assistant Stormwater Program Managers. The Assistant Stormwater Program Manager(s) shall have, in the absence or unavailability of the Stormwater Program Manager, the authority to exercise all of the roles and

<sup>&</sup>lt;sup>3</sup>Riparian buffers in Chatham Park are described in the Master Open Space Plan Additional Element.

responsibilities of the Stormwater Program Manager described in this Element. The Stormwater Program Manager shall notify the Town Stormwater Administrator in writing of the names of all Assistant Stormwater Program Managers.

# Roles and Responsibilities:

The Stormwater Program Manager is charged with being the primary point of contact for all matters related to watershed protection and stormwater management within Chatham Park. The Stormwater Program Manager shall have the following responsibilities:

- 1. To serve on the Chatham Park Development Review Committee and conduct preliminary reviews of all development plans within Chatham Park for consistency with the requirements of the Stormwater Standards prior to submittal of those development plans to the Town;
- 2. To assist the Town Stormwater Administrator with making determinations and interpretations of the requirements in the Stormwater Standards;
- 3. To periodically request that the Town Stormwater Administrator (and the Town Board, if required by this Element) approve revisions and/or updates to the Design Manual in response to changing science or industry standards, or as deemed necessary to better coordinate Chatham Park's commitment to protection of critical environmental resources as development occurs in Chatham Park; and
- 4. To produce and maintain records, maps, forms, and other documents related to the Stormwater Standards as required by this Element.
- 5. To act as a liaison between Town Stormwater Administrator and the POA.

#### Section 3: Performance Standards:

Development and redevelopment in Chatham Park shall be designed to maintain compliance with the Stormwater Standards. Locations for documenting compliance with the applicable Stormwater Standards are described in Subsections A, B, and C of this Section 3.

Each proposed development plan shall show the SCMs and other information used, in whole or in part, to comply the requirements of this Element. Design standards for SCMs in or serving Chatham Park shall be governed by the Design Manual, which incorporates the Town of Pittsboro Design Manual, the NCDOT Stormwater Best Management Practices Toolbox, and the following Sections of the North Carolina Administrative Code ("NCAC"), including any subsequent revisions, additions, and replacements thereof: Sections 15A NCAC 02H.1050 through 02H.1062.

The following Water Quality, Nutrient, and Peak Flow Attenuation standards are part of the Stormwater Standards for Chatham Park.

#### A. Water Ouality:

In accordance with the Town of Pittsboro's "Riparian Buffer Protection Ordinance" ("RBPO"), prior to entering a regulated buffer the concentrated stormwater runoff from developed areas in

Chatham Park resulting from the first one inch (1") of rainfall must be controlled and treated to remove 85% of the Total Suspended Solids (or be treated by one or more "Primary SCMs" or satisfy another standard as determined by NCDEQ). Structural and/or non-structural SCMs may be used to comply with this requirement, and the applicant shall be responsible for documenting that the SCMs have been sized properly and meet the applicable design standards described in the Design Manual.

Stormwater runoff must also meet the diffuse flow requirements of Section 7.E of the RBPO prior to flowing into or through a regulated buffer or comply with alternate standards for diffuse flow set forth by NCDEQ unless the alternate standards are disapproved by the Town Stormwater Administrator.

#### B. Nutrients:

Nutrient loads shall not exceed the export rates established in the Stormwater Standards. Nutrient loading rates shall be calculated using methods described in the Design Manual. Any one or more of the following may be used to reduce the effective onsite nutrient loading rate: onsite SCMs; offsite SCMs; or mitigation credits obtained from mitigation banks approved by NCDEQ to sell mitigation credits within the Haw River watershed, or outside the Haw River watershed if there is no practical alternative within the Haw River watershed for meeting this condition. The use of offsite SCMs or mitigation credits from NCDEQ approved mitigation banks to meet target nutrient export rates shall be disclosed at the time of application for site plan or subdivision plan approval. The Stormwater Program Manager will maintain a record of mitigation credits applied to nutrient loads.

Unless otherwise required by applicable North Carolina laws: (i) nutrient loading rate calculations for nitrogen and phosphorous shall be computed and applied based on the total area within the boundary of Chatham Park; and (ii) nitrogen loading rate shall not exceed 3.8 pounds per acre per year and phosphorous loading rate shall not exceed 1.43 pounds per acre per year.

When a subdivision plan or site plan is submitted to the Town for approval, the Stormwater Program Manager will provide updated nitrogen and phosphorous loading rate calculations for the Chatham Park boundary and, for informational purposes only, for the applicable subwatershed in which the proposed development is located

#### C. Peak Flow Attenuation:

The peak rate of stormwater discharge from each sub-watershed during the 1-year, 2-year, 5-year, and 10-year 24-hour storm events shall not exceed the peak rate of discharge from that sub-watershed for the same storm events that existed prior to development occurring in that sub-watershed in Chatham Park. Compliance with peak flow standards shall be achieved at each "analysis point" identified on the Watershed Map of Chatham Park.

<sup>&</sup>lt;sup>4</sup> The term "analysis point" is defined in Section 6 of this Element.

Where concentrated stormwater flows resulting from development in Chatham Park leave the Chatham Park zoning boundary in a pipe or a channel that does not have a regulated buffer, the peak flow rate during the 1-yr 24 hour storm shall not exceed the pre-development peak flow rate at the same location during pre-development conditions. Additionally, flow shall be discharged at a non-erosive velocity and in a manner which minimizes, to the extent reasonably practicable, potential adverse impacts to downstream property and habitat during the 10-year 24 hour storm event.

In addition to the standards to be achieved at each analysis point, proposed developments within Chatham Park shall control peak flow onsite in a manner which meets both of the following criteria:

- 1. New points of concentrated discharge shall be designed with energy dissipation measures that reduce the peak velocity of discharged runoff during the 10-year 24 hour storm event to a non-erosive velocity; and
- 2. Where the peak rate of stormwater discharge, measured at each point where concentrated stormwater is discharged from a development site, increases by more than 10% over the peak rate of stormwater discharges anticipated during pre-development land conditions at the same location during the 1-year, 2-year, 5-year, or 10-year 24 hour storm events, the applicant shall document the impact from the increased flow rate on existing structures, channels, and conveyance systems downstream of the proposed development. Impacts include, but are not limited to system capacity, flow velocity, and flood levels. The Town Stormwater Administrator may require additional on-site SCMs to mitigate anticipated impacts to downstream conveyances or properties.

#### Exceptional Design Evaluation:

All sub-watersheds in Chatham Park shall achieve a minimum Exceptional Design Evaluation score as defined in the Design Manual. Sub-watershed compliance with the minimum score shall be documented at the time of development plan submittal for each proposed development within the applicable sub-watershed. Points proposed for measures to be employed during construction are subject to verification by the Town Stormwater Administrator upon completion of construction. Documentation shall not be required for sub-watersheds with no active development plans.

### Section 4: Variances:

Variances from the Stormwater Standards may be requested pursuant to Section 308 of the Town's "Stormwater Management Ordinance for New Development and Redevelopment in the Jordan Lake Watershed", or equivalent section of other Town ordinances dealing with stormwater or variances (as applicable, the "Town Stormwater Ordinance").

### Section 5: Maintenance of SCMs:

**Private:** SCMs in Chatham Park shall be private and maintained by the POA, unless accepted for maintenance by the Town or other governmental entity. Upon acceptance of the maintenance obligation for any SCMs in Chatham Park by the Town or other governmental entity, the POA or other non-governmental entity previously responsible for maintenance of those SCMs thereafter shall have no responsibility for maintenance, inspection, repair, record keeping, reporting, or other requirement of this Element with respect to those SCMs. Unless otherwise specifically stated in this Section 5, the provisions of this Section 5 apply only to SCMs in Chatham Park that have not been accepted by the Town or other governmental entity.

**Function:** In order to maintain water quality performance and peak attenuation control, SCMs in Chatham Park shall be maintained substantially consistent with their original approved designs and shall operate as designed, except where changes in maintenance, design, or operation are approved by the Town Stormwater Administrator.

Annual Maintenance and Inspection Report: SCMs within Chatham Park shall be inspected annually by a qualified professional authorized under the Town Stormwater Ordinance or applicable State of North Carolina law or regulation. Documentation of each annual inspection shall be provided to the Town in a format approved by the Stormwater Program Manager and Town Stormwater Administrator. The costs associated with performing and documenting the annual inspections shall be funded by the POA. The Stormwater Program Manager shall be responsible for enforcing the annual inspection program for SCMs within Chatham Park, and shall collect and keep on file copies of the most recent five (5) inspection reports for each SCM, which may be kept in electronic and/or paper form. Each inspection report shall meet the requirements outlined in the Town Stormwater Ordinance. The Town Stormwater Administrator also shall have the right to enforce the annual inspection and reporting requirements of this Element.

Annual Summary Report and Record Keeping: On or before March 31 each year (unless the time for filing is extended by up to thirty (30) days by the Town Stormwater Administrator, or for such longer period as determined by the Town Board), the Stormwater Program Manager shall prepare and submit to the Town Stormwater Administrator a "SCMs Summary Report" for the previous calendar year, which may be submitted in paper and/or electronic form. At a minimum, the SCMs Summary Report shall include the following items:

- 1. The number of each type of SCMs used within Chatham Park;
- 2. An updated map showing the location of each SCM in Chatham Park that has been certified as a SCM by the Stormwater Program Manager or other registered professional engineer or landscape architect licensed in North Carolina, with specific knowledge of North Carolina stormwater practices, policies, and regulations, and that has been accepted by the POA;
- 3. Copies of the annual inspection reports.

- 4. A description of corrective actions taken to address any SCMs which failed an inspection, including the locations of those SCMs;
- 5. A summary of ongoing major repair activities at the time of the report and of major repair activities completed during the previous calendar year; and
- 6. A statement attesting to the completeness and accuracy of the SCMs Summary Report signed and sealed by the Stormwater Program Manager.

Town staff shall have the right to perform audits of the inspection and maintenance records to determine compliance with the Stormwater Standards. The Town, at Town expense, may conduct independent inspections of SCMs within Chatham Park.

**Operation and Maintenance of SCMs:** The POA shall be responsible for operation, administration, and maintenance of SCMs within Chatham Park, and the costs thereof shall be funded by the owners of lots in Chatham Park through assessments paid to the POA in the manner required by applicable restrictive covenants or other document recorded in the office of the Register of Deeds for Chatham County, North Carolina.

Master SCMs O&M Agreement (applicable to all SCMs in Chatham Park): The Town and the POA shall enter into a "Master SCMs Operations and Maintenance Agreement" (also referred to herein as "Master SCMs O&M Agreement), to be approved by the Town Board, to address operation and maintenance of all types of SCMs in Chatham Park. This Master SCMs O&M Agreement may be amended from time to time as recommended by the Stormwater Program Manager or Town Stormwater Administrator and approved by the Town Board or otherwise approved if required by applicable Town ordinances.

**Supplemental SCMs Agreement (applicable to all SCMs in Chatham Park):** In addition to the Master SCMs O&M Agreement", each of the SCMs in Chatham Park shall be subject to a "Supplemental SCMs Agreement" that provides the following information with respect to the SCMs subject thereto:

- The number, type, and location of the SCMs.
- Book and Page of a map recorded in the office of the Register of Deeds for Chatham County, North Carolina that shows the location of the SCMs and/or the location of easements that provide access to the SCMs from a publicly dedicated street right of way, which map may be recorded contemporaneously with the recording of the Supplemental SCMs Agreement.
  - The person or legal entity responsible for construction or installation of the SCMs.
- Additional information deemed to be necessary by the Town Stormwater Administrator and Stormwater Program Manager.

Each Supplemental SCMs Agreement shall be signed by the person or legal entity responsible for construction or installation of the SCMs subject to the Supplemental SCMs Agreement and by the Town Stormwater Administrator or other person designated by the Town. Each Supplemental SCMs Agreement shall be recorded in the office of the Register of Deeds for Chatham County, North Carolina, at the expense of the person or legal entity responsible for

construction or installation of the SCMs, prior to the issuance of a certificate of occupancy for any property in Chatham Park that is served by any of the SCMs subject to that Supplemental SCMs Agreement.

**SCMs Access:** All SCMs in Chatham Park shall be accessible either directly from a public street right of way or over an access easement to the Town shown on a plat or other map recorded in the office of the Register of Deeds for Chatham County, North Carolina. The Stormwater Program Manager shall maintain one or more maps showing the locations of all SCMs that have been certified as SCMs in accordance with the provisions of this Element and the location of all easements providing access to the SCMs in Chatham Park, and, on or before March 31 of each year, shall provide a copy of the most recently updated map to the Town Stormwater Administrator.

Maintenance Security: To ensure long term operation of SCMs in Chatham Park, the POA will establish and maintain a perpetual escrow account for major repairs ("Escrow Account"), the monies in which may be used only for major repair, reconstruction, and/or replacement of SCMs in Chatham Park for which the POA has the maintenance obligation. A "major repair" is a repair to be paid for by funds in the Escrow Account, as determined by the Stormwater Program Manager and the Town Stormwater Administrator, or, if they are unable to agree as to what constitutes a major repair, as determined by the Board. An amount equal to 15% of the original construction costs of each such SCM (the "Escrow Amount"), including SCMs located in public street rights of way, shall be deposited into the Escrow Account by the developer and/or owners of the lot(s) or development parcel(s) that are served by that SCM, in accordance with the following schedule: (i) not less than fifty percent (50%) of the Escrow Amount shall be deposited into the Escrow Account prior to issuance of the first certificate of occupancy for improvements on those lot(s) or development parcel(s) served by the SCM; and (ii) the balance of the Escrow Amount shall be deposited into the Escrow Account on or before the date that is five (5) years immediately following the date of issuance of the first certificate of occupancy for improvements on the lot(s) or development parcel(s) served by the SCM, with not less than one-fifth (1/5) of such balance being deposited on or before the end of each year of the five (5) year period. To establish the obligation for initial funding of the Escrow Account for SCMs located in public street rights of way, the Stormwater Program Manager shall determine the lot(s) or development parcel(s) that are served by those SCMs. Funds may be disbursed from the Escrow Account only for major repair, reconstruction, and/or replacement of SCMs, including payment of associated engineering and surveying fees and administrative costs. No funds from the Escrow Account shall be used to pay for inspection and minor maintenance of any SCMs or for inspection and reporting requirements, other than inspection and reporting that is required for the implementation of a major repair, reconstruction, and/or replacement of any SCMs in Chatham Park.

Funds disbursed from the Escrow Account for the implementation of a major repair, reconstruction, and/or replacement of a SCM shall be replaced within five (5) years following the end of the calendar year in which the disbursement is made by payment of assessments to the

POA by the owners of all lots and development parcels in Chatham Park that are in the same subwatershed in which the SCMs is located, except for owners of lots and development parcels that are exempt from such assessments under applicable restrictive covenants. Not less than one-fifth (1/5) of the amount of such replacement funds shall be deposited on or before the end of each calendar year of the five (5) year period. On or before March 31 each year, the POA shall provide a report to the Town Stormwater Administrator documenting all receipts in and disbursements from the Escrow Account for the immediately preceding calendar year, the balance in the Escrow Account as of December 31 of the immediately preceding calendar year, and the proposed time period for returning the balance in the Escrow Account to the required minimum amount.

With respect to any deficiency in funding of the Escrow Account:

- (1) the Town may bring an action against the POA and/or the person or legal entity who has failed to satisfy a funding obligation to recover the deficiency and the costs of the action, including reasonable attorneys' fees; and
- (2) In addition, the Town may file a lien on the properties in Chatham Park owned by the person or legal entity who has failed to satisfy a funding obligation for the amount of the deficiency and may foreclose on such lien in accordance with North Carolina laws applicable to judicial foreclosures. Any such lien shall be filed in the office of the Chatham County Clerk of Court and shall describe with reasonable certainty the amount of the deficiency, the developer and/or owners liable for payment of the deficiency, and the type and location of the particular SCMs associated with the deficiency. Funds recovered through any judicial foreclosure process, less the reasonable costs of recovering such funds, including reasonable attorneys' fees, shall be paid into the Escrow Account.

# Section 6: Watershed Map:

The Stormwater Program Manager shall maintain a map showing all sub-watersheds in Chatham Park that have been delineated by the Stormwater Program Manager and approved by the Town Stormwater Administrator (the "Watershed Map"). The Watershed Map may consist of one or more maps, tables, documents, and other supporting data. The Stormwater Program Manager shall update the Watershed Map annually to provide the information required by this Element and file a copy of the updated Watershed Map with the Town Stormwater Administrator.

The Watershed Map will include not less than all of the following with respect to each sub-watershed in Chatham Park: topography information; aerial photography from Chatham County GIS or other source reasonably deemed satisfactory by the Town Stormwater Administrator; sub-watershed names or numbers and approximate boundaries thereof; analysis point locations; WSIV-CA critical water supply watershed areas; and a summary of the computed exceptional design evaluation score and minimum required exceptional design evaluation score.

Each "analysis point" shown on the Watershed Map serves as a compliance point for applicable Stormwater Standards. Each analysis point is located at the most downstream point of its

respective sub-watershed or applicable portion thereof. Each analysis point shown on the Watershed Map shall meet one of the following criteria:

- 1. A location where a stream in a regulated buffer flows to property outside of the boundary of Chatham Park PDD; or
- 2. For sub-watersheds that are greater than 150 acres in size, one or more analysis points within that sub-watershed shall be added at the request of the Town Stormwater Administrator, subject to the following:
- a. Each additional analysis point shall be on a perennial stream within the subwatershed.
- b. The land area draining to the additional analysis point shall not be less than 50 acres in size.
- c. The location of the additional analysis point shall be as agreed by the Town Stormwater Administrator and the Stormwater Program Manager or, if they cannot agree on the location, as determined by the Town Board.

Analysis points may be used as regional points of compliance when documenting adherence to the Stormwater Standards.

# Section 7: Chatham Park Stormwater Design Manual:

The Design Manual shall include technical design standards, calculation methodology, watershed/sub-watershed evaluation criteria, and maintenance standards for SCMs within Chatham Park. The Design Manual is attached to this Element as "Attachment 1". The criteria, information, specifications, and technical standards in the Design Manual shall serve as the basis for documenting compliance with the requirements of the Stormwater Standards.

The Design Manual also shall include the following:

- 1. A description of the SCMs approved for use in Chatham Park, which include, without limitation, all of the following: SCMs described in the Town of Pittsboro Design Manual, SCMs described in Sections 15A NCAC 02H.1050 through 02H.1062, including any subsequent revisions, additions, and replacements thereof; and, for NCDOT roadways in Chatham Park, SCMs described in the North Carolina Department of Transportation ("NCDOT") Stormwater Best Management Practices Toolbox;
- 2. Items required to be included with a submittal of an Application for Stormwater Discharge Permit in the form included in the Design Manual;
- 3. Documentation and standards for the Exceptional Design Evaluation defined in Section 8 of this Element;
- 4. Forms used to document compliance with the Stormwater Standards; and
- 5. Standards for operation, periodic inspection, and maintenance of SCMs in Chatham Park.

The Design Manual, including all applicable appendices, may be revised and/or updated from time to time as deemed necessary by the Stormwater Program Manager and the Town Stormwater Administrator, and shall be periodically revised and/or updated to maintain consistency with applicable State of North Carolina laws and regulations. Provided, the following revisions and updates are subject to Town Board approval: (i) all revisions to the points assigned under the Exceptional Design Evaluation scoring system; and (ii) revisions or updates requested by either the Stormwater Program Manager or the Town Stormwater Administrator not agreed to by the other party, in which event either party may request the Town Board to determine whether to approve the revisions or updates.

# Section 8: Exceptional Design:

In addition to the minimum stormwater performance standards outlined in the Master Plan and applicable Town regulations, each development project in Chatham Park will be designed to uphold the commitment to exceptional design for protection of critical environmental resources. Each sub-watershed has one minimum required evaluation score, which is a weighted average computed using the percentage of the sub-watershed located within each of the following three (3) zones:

Zone 1 – within 1,000 feet of the top of bank of the Haw River

Zone 2 – between 1,000 feet and 2,000 feet from the top of bank of the Haw River

Zone 3 – greater than 2,000 feet from the top of bank of the Haw River

The minimum required evaluation score for each zone is as follows, and shall be calculated as provided in the Design Manual:

Zone 1 - 130 points

Zone 2 - 125 points

Zone 3 - 120 points

The Design Manual shall include an explanation of the "Exceptional Design Evaluation" for development projects in Chatham Park, which shall quantify through a scoring system the balance between impacts to critical environmental resources and environmental uplift measures deployed within the built environment. The Design Manual shall include a template for submitting data needed by the Stormwater Program Manager to complete the evaluation for each sub-watershed shown on the Watershed Map. The forms and templates required by the Design Manual may be modified from time to time as determined by the Stormwater Program Manager and the Town Stormwater Administrator.

For each development plan in Chatham Park, a completed Exceptional Design Evaluation worksheet shall be submitted to the Stormwater Program Manager for review and comment prior to submission of such development plan to the Town. The Stormwater Program Manager shall

document and update the evaluation score for each applicable sub-watershed upon receipt of the Exceptional Design Evaluation worksheet and shall provide a copy of such documentation and update of applicable sub-watershed scores to the development plan applicant and Town Stormwater Administrator. Not less than the required minimum evaluation score, calculated using methods described in the Design Manual, shall be maintained at all times in each sub-watershed. The Town can require submittal of an updated sub-watershed score when construction inspections or as-built documents show significant deviations from the approved development plan. If a development would result in a sub-watershed score below the required minimum evaluation score, or if the updated sub-watershed score from a post-construction recalculation results in a sub-watershed score less than the required minimum evaluation score, the Town can deny or delay issuance of a certificate of occupancy for that development and/or approval of additional development plans and issuance of permits within that sub-watershed until a mitigation plan for bringing the sub-watershed back into compliance with the minimum evaluation score has been approved by the Town Stormwater Administrator.

### Section 9: Public Facilities:

For the purposes of this Element, the term "Public Facilities" refers to those types of facilities identified as public facilities in the Master Public Facilities Plan Additional Element. If, at the time that a site plan for any Public Facilities is submitted to the Town, the Exceptional Design Evaluation score for the sub-watershed in which the proposed Public Facilities is located is less than 125, the applicant or the Chatham Park Development Review Committee can elect to exclude the proposed Public Facilities from the requirements of the Stormwater Element and Design Manual and to require that on-site SCMs be provided for the proposed Public Facilities that meets all requirements of the Town and all other applicable governmental entities. The election to exclude the proposed Public Facilities from the requirements of the Stormwater Element and Design Manual must be in writing and delivered to the Town Stormwater Administrator prior to approval by the Town of the site plan for the proposed Public Facilities, and the Town Stormwater Administrator shall provide copies of the election to the Stormwater Program Manager. If the proposed Public Facilities are excluded from the requirements of the Stormwater Element and Design Manual, the property on which the proposed Public Facilities is located shall be excluded from the sub-watershed for the purposes of calculating the Exceptional Design Evaluation score for that sub-watershed and compliance with the Stormwater Element and the Design Manual.

# 6. Parking and Loading Element

# Section 1. Off-Street Parking and Loading

# **Applicability**

**New Development** – Except as otherwise provided herein, the off-street parking and loading standards of this Element shall apply to all new development in Chatham Park.

**Expansions and Alterations -** The off-street parking and loading standards of this Element shall apply when an existing structure or use is expanded or enlarged.

**Change of Use -** Off-street parking and loading must be provided for any change of use or manner of operation that would, based on the Off-Street Parking Schedules of this Element, result in a requirement for more parking or loading spaces than the existing use.

# Off-Street Parking Requirements

The minimum number of off-street parking spaces set forth in the following Schedules shall be provided for each development. Off-street parking spaces may be provided anywhere on a Lot or as otherwise allowed herein, either as surface parking spaces, or spaces within parking structures, whether above or below ground. The applicant may exceed such minimum number of spaces based upon its individual requirements. If a use is not addressed in the Schedules, or is designated "Schedule C", the Planning Director shall determine a parking standard for the use based upon the standard specified in the Schedules for the most similar use. In every case, regardless of whether a use is addressed in the Schedules, an applicant may propose an Administrative Alternative based upon a parking study prepared by a North Carolina licensed design professional.

### A. Off-Street Parking Schedule "A"

Off-street parking for motor vehicles and bicycles shall be provided in accordance with Table 1.

Table 1: Off-Street Parking Schedule "A"

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Agricultural Use		
Agricultural production (crops)	None	None
Agricultural production (livestock) but not	None	None
including feeder/breeder operations		
Animal Feeder/breeder operation	1 per 2 employees	None
Forestry	None	None
Game preserves, fish hatcheries, ponds	None	None

Nurseries, truck farms, commercial	1 per 2 employees	None
greenhouses		
Mining Uses		
Quarries and other extractive industries	1 per 600 square feet of office	1 per 50 Vehicle Spaces
(see note 1)	space plus 1 per 3,000 square	
	feet of additional indoor area	

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Residential Uses		
Bed and Breakfast	1 per guest room	Minimum of 1Bicycle Rack
Bed and Breakfast with open dining	1 per guest room plus 1 per 50 square feet of floor space dedicated to public use	None
Condominiums, residential	1 per bedroom	1 per 20 Units
Family care home	1 per each 4 beds	None
Manufactured home, Class A	2 per dwelling unit	None
Manufactured home, Class B	2 per dwelling unit	None
Manufactured home park	2 per dwelling unit	None
Modular home	2 per dwelling unit	None
Pocket neighborhoods	Schedule C	None
Rehabilitation homes, such as halfway houses	1 per each 4 beds plus 1 additional parking space, with a minimum of 4 parking spaces	1 per 20 Units
Residences, Multi-family (e.g. Apartments)	1 per bedroom	1 per 20 Units
Residences above commercial use	1 per bedroom	1 per 20 Units
Residences, one-family detached	2 per dwelling unit	None
Residences Townhouses	2 per dwelling unit plus 0.25 per unit for guest parking	None
Residences, two-family	2 per dwelling unit	None
Accessory Uses and Structures		
Accessory buildings	None	None
Accessory dwelling units	1 per accessory dwelling unit	None
Home occupation	1 per 600 square feet of office space	None
Residences, for care taker or domestic employee on premises where employed	1 space per bedroom	None
Rural family occupation	Schedule C	None
Swimming pools	1 space per 75 square feet of water surface area	1 per 30 Vehicle Spaces
Recreational Uses		
Amusement, commercial including bowling alleys, roller skating rinks	1 per 300 square feet; bowling alleys – 5 per lane	1 per 50 Vehicle Spaces

Athletic fields, play grounds	Schedule C	1 per 50 Vehicle
		Spaces
Bingo games	1 per 50 square feet of floor space devoted to public use	1 per 5000 square feet of floor space devoted to public use
Clubs and lodges; private, nonprofit	1 per 400 square feet	1 per 5000 square feet
Fairgrounds	Schedule C	1 per 50 Vehicle Spaces

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Game rooms	1 per 100 square feet	1 per 5000 square feet
Golf Courses, except par three or	4 per hole plus 1 per 500	None
miniature courses	square feet of club house	
Golf driving range	1 per teeing station	None
Hunting Clubs, recreational camps; commercial and non-profit	Schedule C	None
Fitness centers – commercial	1 per 200 square feet	1 per 5000 square feet
Fitness centers – accessory use	Schedule C	None
Public parks, recreational facilities	Schedule C	1 per 50 Vehicle Spaces
Stables, riding and boarding; commercial	1 per 3 stalls	None
Educational and institutional Uses		
Auditoriums, assembly halls	1 per 5 seats	1 per 50 Vehicle Spaces
Cemetery or mausoleum	None	None
Churches & other places of worship, rectories	1 per 4 seats in principal assembly area	1 per 50 Vehicle Spaces
College, universities, etc., and incidental uses on same property	Schedule C	1 per 20,000 square feet of academic space
Community buildings, not for commercial gain	1 per 400 square feet	1 per 5,000 square feet
Correctional, penal institutions, jails	Schedule C	1 per 5,000 square feet
Fire Station/emergency medical service	Schedule B	1 per 5,000 square feet
Hospitals, Nursing Homes	Hospital: 1 per 2 beds plus 1 per employee NH: 0.25 per resident + 1 per each staff person	1 per 50 parking spaces
Philanthropic institutions	1 per 250 square feet	1 per 50 parking spaces
Post Office	Schedule B	1 per 5,000 square feet
Public buildings (no outside storage) libraries, museums, art galleries	1 per 400 square feet	1 per 5,000 square feet

\ /1 1 ·	2 per classroom, or 1 per 3 seats in auditorium, whichever	2 spaces per classroom
	is more	

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Business, Professional, and Personal		
Services		
Automobile painting, and fender works; truck repairing	1 per 600 square feet	1 per 10,000 square feet
Automobile repair shops; all work within a completely enclosed building	1 per 600 square feet	1 per 10,000 square feet
Agencies, including travel, broker, insurance, loan, employment	1 per 300 square feet	1 per 10,000 square feet
Automobile parking lots serving uses permitted in districts in which the lot is located	None	None
Automobile parking lots, serving nonresidential uses in another district	None	None
Automobile parking lots, commercial	None	None
Automobile service station, no outside storage of used, wrecked, inoperable or dismantled automobiles; gasoline sales with or without gasoline sales	5 per service bay, including the service bay space	None
Banks, savings and loan, similar financial institutions	1 per 150 square feet	1 per 10,000 square feet
Beauty salons, barber shops	3 per chair	None
Blacksmith and Horseshoeing shop	1 per 2 employees	None
Carwash, automated	Schedule C	None
Carwash, self-service	Schedule C	1 per 10,000 square feet
Catering establishments	1 per 300 square feet	None
Cleaners, laundries	1 per 300 square feet	None
Cleaners, laundries, self-service	1 per 3 washing machines	None
Day care facility	1 per 6-person capacity	None
Electrical shops	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Equipment repair, heavy	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Funeral home	1 per 5 seats in chapel, plus 1 per each hearse, ambulance, or related vehicle	1 per 10,000 square feet
Crematorium	1 per each 500 square feet	1 per 10,000 square feet

Hotels, motels	3 spaces plus 1 per guest room	1 per 20 beds

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Kennels, commercial, pet grooming	1 per 300 square feet	1 per 10,000 square feet
Laboratories, experimental, photo or motion picture, film or testing	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Laboratories, medical, research	1 per 200 square feet	1 per 10,000 square feet
Locksmith and gunsmith	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Medical, dental, paramedical, chiropractic offices	1 per 200 square feet of gross floor space	1 per 10,000 square feet
Miscellaneous services, not listed	1 per 400 square feet	1 per 10,000 square feet
Offices, general	1 per 300 square feet	1 per 10,000 square feet
Offices, professional or nonprofit	1 per 300 square feet	1 per 10,000 square feet
Printing or binding shop	1 per 300 square feet	1 per 10,000 square feet
Repair and servicing of office and household equipment	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Service establishments, professional and personal services not otherwise listed	1 per 300 square feet	1 per 10,000 square feet
Shoe repair	1 per 100 Square Feet	1 per 10,000 square feet
Small item repair shop	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Spa	1 per 200 square feet	1 per 10,000 square feet
Theater, indoor (except adult theater)	1 per 5 seats	1 per 500 seats
Theater, outdoor	1 per every 3 fixed seats or 1 per each 35 sf of non-fixed seating	1 per 250 seats
Decorator shops, upholstery, paper hanging	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet

Veterinary establishments	1 per 400 square feet	1 per 10,000 square feet

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Vocational business, secretarial schools, music or dance studios	1 per 600 square feet of academic space plus 1 per each 5 seats in principal assembly room	1 per 10,000 square feet
Wood working shops	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Retail Trade		
Adult bookstore, adult entertainment club, adult theater	1 per 60 square feet	1 per 10,000 square feet
Antiques and gift retail stores	1 per 200 square feet	1 per 10,000 square feet
Appliance sales and service	1 per 200 square feet	1 per 10,000 square feet
Arts and crafts supply and retail sales	1 per 200 square feet	1 per 10,000 square feet
Automobile accessories sales	1 per 200 square feet	1 per 10,000 square feet
Automobile sales, new and used	2 spaces plus 1 per 800 square feet of floor area over 1600 square feet	1 per 10,000 square feet
Bakeries, on-site retail sales	1 per 200 square feet	1 per 10,000 square feet
Bicycle and motorcycle sales and repair	1 per 200 square feet	1 per 10,000 square feet
Book (except adult) and stationary stores	1 per 200 square feet	1 per 10,000 square feet
Building and hardware supplies with open storage	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Building and hardware supplies without open storage	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Clothing sales	1 per 200 square feet	1 per 10,000 square feet
Convenience stores with gas pumps	1 per 200 square feet	1 per 10,000 square feet
Convenience stores without gas pumps	1 per 200 square feet	l per 10,000 square feet

	T	1
Craft production and retail sales	1 per 200 square feet	1 per 10,000 square feet
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Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Drugstore	1 per 200 square feet	1 per 10,000 square feet
Electronic gaming operation	1 per 300 square feet	1 per 10,000 square feet
Drugstore with medical office, hospital or nursing facility	1 per 300 square feet	1 per 10,000 square feet
Market, open air farmers market, etc.	Schedule B	1 per 10,000 square feet
Food stores	1 per 200 square feet	1 per 10,000 square feet
Fuel oils sales	1 per 200 square feet	1 per 10,000 square feet
Furniture, home furnishings	1 per 200 square feet	1 per 10,000 square feet
Garden center, retail nursery	1 per 800 square feet of lot area used for open air sales or display plus additional spaces for retail sales (computed per schedule B)	1 per 10,000 square feet
LP gas refueling station	Schedule B	1 per 10,000 square feet
Manufactured home sales	Schedule B	1 per 10,000 square feet
Massage parlor	1 per 300 square feet	1 per 10,000 square feet
Nightclubs (Except adult entertainment clubs), bars, taverns	1 per 50 square feet or 1 per every 4 persons of maximum of fire-rated capacity	1 per 10,000 square feet
Photographic developing, processing and finishing	1 per 200 square feet	1 per 10,000 square feet
RV, boat, agriculture implement, heavy machinery sales, rental storage	Schedule B	1 per 10,000 square feet
Restaurants	1 per 150 square feet of gross floor area or 1 per 5 seats, whichever is greater	1 per 25,000 square feet
Restaurants, drive-in, drive thru	1 per 150 square feet of gross floor area or 1 per 5 seats, whichever is greater	1 per 25,000 square feet
Retail business not otherwise listed	1 per 200 square feet	1 per 10,000 square feet

Tattoo parlor/Tattoo studio establishment	1 per 300 square feet	1 per 10,000 square feet
and/or body piercing		

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Wholesale Trade		
Appliance distributor	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Flowers, nursery stock, florist supplies	2 per 3 employees	1 per 10,000 square feet
Wholesale establishment, not listed	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	1 per 10,000 square feet
Transportation, Warehouse and Utilities		
Landing strip	Schedule C	None
Broadcasting studio, radio, TV	l per 200 square feet of office or administrative area	1 per 10,000 square feet
Construction storage yards	1 per 600 square feet of office space plus 1 per 3,000 square feet of additional indoor area	None
Flammable liquids or gasses, bulk storage, <100,000 gallons	Schedule B	None
Flammable liquids or gasses, bulk storage, >100,000 gallons	Schedule B	None
Garbage landfills, incinerators	Schedule B	None
Public utilities; no service and storage yards	Schedule B	None
Public utilities; with service and storage yards	Schedule B	None
Public water and wastewater treatment facilities	Schedule B	None
Storage, outdoor not otherwise listed	Schedule B	None
Telephone exchanges, radio, and TV towers, transmitting stations, communication towers over 50' height	Schedule B	None
Transportation terminals, freight	Schedule B	None
Transportation terminals, passenger	Schedule B	None
Warehouse, general	Schedule B	1 per 10,000 square feet
Warehouse for finished lumber and other wholesale goods in enclosed storage buildings	Schedule B	None
Warehouse, mini, no unit >400 square feet	Schedule B	None

Manufacturing and Industrial		
Animal slaughtering and rendering	Schedule B	None

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Assembling of electrical appliances,	Schedule B	None
electronic instruments; manufacturing of		
small parts only		
Bakeries, bottling works	Schedule B	None
Concrete plants, Asphalt plants	Schedule B	None
Electric and electronic machinery,	Schedule B	None
equipment, supplies		
Electroplating of metal	Schedule B	None
Foundry casting, light weight, nonferrous	Schedule B	None
metal, not causing noxious fumes, noise or odors		
Ice	Schedule B	None
Junkyards	Schedule B	None
Machine shop excluding punch press over	Schedule B	None
20 tons rated capacity, drop hammers and		
automatic screw machine		
Manufacture of pottery and figurines,	Schedule B	None
ceramic products, etc., fired only by		
electrical or gas kilns		
Manufacture and assembly of electric and	Schedule B	None
neon signs, billboards, light sheet metal		
products, etc.		
Manufacture of musical instruments, toys,	Schedule B	None
novelties, and rubber and metal stamps		
Manufacturing, compounding, processing,	Schedule B	None
packaging or treatment of such products		
as bakery goods, candy, cosmetics, dairy		
products, etc.		
Metal shops involving fabrication of sheet	Schedule B	None
metal only		
Monument works, stone works	Schedule B	None
Planing or saw mills	Schedule B	None
Poultry dressing plants	Schedule B	None
Poultry and egg processing	Schedule B	None
Primary metal products	Schedule B	None
Sheet metal, roofing shops	Schedule B	None
Other Uses		
Any use not prohibited by law and not	Schedule C	Schedule C
addressed elsewhere in this Table		
Art and craft shows/fairs	Schedule C	None
Christmas tree sales	Schedule C	None

Condominiums, commercial	Schedule C	l per 10,000 square feet

Use Type	Minimum Number of Motor Vehicle Spaces Required ("Vehicle Spaces")	Minimum Number of Bicycle Spaces Required
Exhibition building, galleries or showrooms	Schedule B	1 per 10,000 square feet
Fences and walls	None	None
Outdoor religious events	Schedule C	
Shopping centers	1 per 200 square feet	1 per 10,000 square feet
Signs	None	None
Temporary buildings incidental to a construction project		None
Adult care homes	1 per 4 beds	None

Note 1: square feet is gross square feet of interior building space.

Note 2: Where parking spaces are based on number of employees, the number of parking spaces is to be calculated based on the number of employees at the working shift that has the most number of employees.

Note 3: Unless otherwise specifically indicated, parking spaces in garages, carports, and motor vehicle service bays are credited against the total number of required parking spaces.

Note 4: A "Bicycle Rack" is a stationary fixture to which a minimum of four (4) bicycles can be securely attached. All bicycle parking spaces required by this Element shall be provided by bicycle racks. When bicycle parking spaces are required, a minimum of one (1) bicycle rack shall be provided, regardless of the number of units, vehicle spaces, square feet, or other measurement.

### **B. Off-Street Parking Schedule "B"**

Uses subject to off-street parking schedule "B" shall provide the following minimum number of off-street parking spaces.

Table 2: Off-Street Parking Schedule "B"

Activity	Number of Spaces Required	
Office or administrative area	1 per 300 square feet	
Indoor sales area	1 per 200 square feet	
Outdoor sales or display area (3,000 square feet or	1 per 750 square feet	
less)		
Outdoor sales or display area (over 3,000 square feet)		
Motor vehicles/equipment sales	1 per 2,000 square feet	
Other sales/display	1 per 1,000 square feet	
Indoor storage/warehousing/vehicle service/manufacturing area		
1–3,000 square feet	1 per 250 square feet	

3,001–5,000 square feet	1 per 500 square feet
5,001-10,000 square feet	1 per 750 square feet
10,001-50,000 square feet	1 per 1,250 square feet
50,001 square feet+	1 per 2,000 square feet

### C. Off-Street Parking for Bicycles

New development shall provide off-street bicycle parking spaces in accordance with Schedule A. In all cases, required off-street vehicle parking may be reduced by one (1) space for each two (2) off-street bicycle parking spaces provided above the required minimum number of off-street bicycle parking spaces. Provided however, in no event shall the number of off-street vehicle parking spaces be reduced below 90% of the required number of off-street parking spaces

Off-street bicycle parking shall include a secure facility (i.e. racks, posts) to which to lock bicycles that comply with the following standards:

- 1. Bicycle parking facilities shall be located so as to be reasonably convenient to the on-site use.
- 2. Each bicycle parking area shall be designed in a manner not to interfere with pedestrian and automobile traffic.

## Section 2. Rules for Computing Requirements

#### Multiple Uses:

For a mixed-use development, the applicant may request an Administrative Alternative to establish a parking standard for that development based upon a parking study prepared by a North Carolina licensed design professional.

#### Area Measurements:

When square footage is the basis for calculating parking or loading requirements of this Element, it means the gross square footage of interior building space.

#### Occupancy-Based or Capacity-Based Standards:

For the purpose of computing parking requirements based on employees, students, residents or occupants, calculations shall be based on the largest number of persons working on any single shift, the maximum enrollment, average daily membership, or the maximum fire-rated capacity, whichever is applicable.

#### Compact Vehicle Parking Spaces:

Up to twenty percent (20%) of the required number of off-street vehicle parking spaces may be designed to accommodate compact vehicles, which shall allow a reduction in the width of those parking stalls to eight (8) feet.

#### Electric Vehicle (EV) Charging Stations:

Up to ten percent (10%), or any greater percentage approved as an Administrative Alternative, of the required number of off-street vehicle parking spaces may consist of electric vehicle (EV) charging stations.

## Section 3. Off-Street Loading Requirements

### Off-Street Loading Schedule:

Off-street loading spaces shall be required for industrial, office, institutional, business, and other uses that can be expected to regularly receive or deliver goods, pursuant to the following Off-Street Loading Schedule. An applicant may request an Administrative Alternative to the required number of loading spaces for businesses that receive or deliver a substantial part of goods only by United States Postal Service, or by United Parcel Service, Federal Express, or other substantially similar delivery service.

**Table 3: Off-Street Loading Schedule** 

Gross Square Feet	Required Number of Loading Spaces
Less than 40,000	1
40,001 - 240,000	2
Each 90,000 (or fraction	1
thereof) over 240,000	

#### **Dimensions:**

Required loading spaces (bays) shall have the following minimum dimensions: 12-foot minimum width, 25-foot minimum length, and 14-foot minimum vertical clearance. If larger vehicles are to be used, development plans must reflect the larger size space needed.

#### Location:

- 1. Required off-street loading spaces shall be on the site of the use served or on an adjoining site.
- 2. No loading bay may intrude into any portion of a required parking aisle or access drive

#### Access:

- 1. A required loading space shall be accessible without requiring the backing of a truck on a public street.
- 2. An occupied loading space shall not prevent access to a required off-street parking space.

#### Section 4. Vehicular Use Area Standards

A vehicular use area, or "VUA", is an area, other than a public street right of way, where motor vehicles are either parked, stored, or driven, including private driveways, private streets, parking lots, motor vehicle display lots, and motor vehicle rental depots, but not including alleyways, parking structures or buildings, underground areas, or areas which are used exclusively as loading areas or service areas.

## Access to Parking Areas:

- 1. All off-street parking spaces shall be accessible without backing into or otherwise reentering a public right-of-way, unless it is physically impracticable to provide for such access or unless otherwise approved as an Administrative Alternative. An alley or private street or drive may be used as maneuvering space for access to off-street parking.
- 2. When a VUA does not abut a public street, an access drive connecting the VUA to a public street shall be provided that is not less than 24 feet in width for two-way traffic, or not less than 20 feet in width for one-way traffic.

## Dimensions

#### Surfacing

Each VUA shall be paved unless alternative materials are approved by the Planning Director.

## Pedestrian Connectivity

Each VUA shall be designed to allow pedestrians to move safely from their vehicles to buildings and other areas served by the VUA.

#### Markings

Parking spaces, drive isles, and traffic control devices shall be installed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) or other standards manual generally accepted by municipalities in the State of North Carolina.

### Vehicle Stacking Areas

Vehicle stacking shall be provided in accordance with the following:

<u>Use</u>	Stacking Requirement			
Bank or other financial institution				
Per teller lane	4			
Per automatic teller machine (ATM)	3			
Restaurant with drive through	8			
Car wash - automated				
If primary use	6			
If ancillary use	2			
Car wash – self-service	3			
Motor vehicle gas pump island	1 per pump island, in addition to			
	the space at the pump			
Drug Store	3			

Each vehicle stacking space shall be a minimum of 18 feet in length.

With respect to any other use determined by the Planning Director to require vehicle stacking space, the stacking requirement shall be determined by the Planning Director based upon an analysis provided by the developer and prepared by a licensed design professional.

#### Mail Box Kiosk

Parking for mail box kiosks shall be designed in accordance with the requirements of this Element and any applicable requirements of the United States Postal Service or its successor or other provider of mail services (together, "USPS"). Unless otherwise required by USPS, the following parking requirements are applicable to developments used for single-family detached residential dwellings:

1. No parking shall be required for a mail box kiosk that contains thirteen (13) or less mail boxes (exclusive of any storage box required or maintained by USPS).

- 2. For mail box kiosks containing between 14 and 26 mail boxes (exclusive of any storage box required or maintained by USPS), 1 space plus 1 additional space meeting applicable requirements for persons with disabilities.
- 3. For mail box kiosks that contain 27 or more mail boxes (exclusive of any storage box required or maintained by USPS), in addition to the requirement for mail kiosks containing between 14 and 26 mail boxes (exclusive of any storage box required or maintained by USPS), 1 additional space for each 26 additional mail boxes (exclusive of any storage box required or maintained by USPS).

Unless otherwise required by USPS, no additional parking is required for mailbox kiosks used in connection with non-residential uses or with residential apartments, condominiums, townhouses, or other types of residential uses.

#### Section 5. Use of Vehicular Use Areas

Required VUAs are to be used solely for the parking of licensed motor vehicles in operating condition. Required parking spaces may not be used for the display of goods for sale or lease or for long- term storage of vehicles, boats, motor homes, campers, mobile homes, or building materials.

## Section 6. Off-Street Parking Alternatives

## Off-Site Parking:

The Planning Director, as an Administrative Alternative, may approve any of the following:

- 1. The location of required off- street parking spaces on a separate lot from the lot on which the principal use is located if the off- site parking complies with the all of following standards.
  - a. Ineligible Activities: Required parking spaces reserved for persons with disabilities may not be located off-site.
  - b. Location: No off-site parking space may be located more than 600 feet from the primary entrance of the use served (measured along the shortest legal pedestrian route) unless valet parking or remote parking shuttle service is provided. Off-site parking spaces may not be separated from the use served by a street right-of-way with a width of more than 60 feet, unless a grade-separated or signal-controlled pedestrian walkway is provided, or other traffic control or remote parking shuttle service is provided.
  - c. Agreement for Off-Site Parking: In the event that an off-site parking area is not under the same ownership as the principal use served, a written agreement between the record owners will be required. The agreement must guarantee the use of the off-site parking area for at least 10 years. Recordation of the agreement must take place before issuance of a certificate of occupancy or certificate of zoning compliance for any use to be served by the off-site parking area. No use shall be continued if the parking is removed unless substitute parking facilities meeting the requirements of this Element are approved by a development plan approval or

approved by the Planning Director as an Administrative Alternative.

- 2. A reduction in the number of required parking spaces for residential uses that are within one-half mile of a public transit stop.
- 3. Any other parking eligible for an Administrative Alternative in this Element.

# 7. Signage Element

## Section 1. Purpose & Applicability

## Purpose

The purpose of the Master Signage Element is to provide regulations for the use of signs in Chatham Park which aid orientation and identify activities or uses, while at the same time enhancing the information displayed to the public, promoting public safety, and maintaining community wide aesthetics. The purposes set out in the Chatham Park Master Lighting Plan Additional Element are incorporated by reference.

## **Applicability**

The standards, requirements, and criteria (those words being used interchangeably herein) in this Element apply to all signs in Chatham Park PDD, unless otherwise indicated. With respect to any development plan submitted for approval or any sign permit applied for prior to the adoption of this Element, the owner of the Lot for which such development plan has been submitted or sign permit has been applied for may, at any time within six (6) months immediately following the later of the adoption of this Element, the approval of the development plan, or the issuance of the sign permit, elect to have this Element apply. If the owner so elects, the owner shall bring the signage on the Lot into compliance with this Element within one (1) year immediately following the date on which the owner elects to be subject to this Element. Any such election by an owner shall be in writing and the date of the election shall be the date it is delivered to the office of the Planning Director.

#### Substitution of Non-commercial Copy

Notwithstanding any provision in this Element to the contrary, non-commercial copy may be placed on any on-premises sign, or on any allowed off-premises sign, in place of commercial copy.

## Section 2. Sign Plans

Prior to issuance of any permit for a sign in a Small Area, a "Master Sign Plan" for that Small Area that complies with this Element shall be submitted to and approved by the Planning Director. Each Master Sign Plan shall address the following:

- 1. Colors.
- 2. Materials.
- 3. Lettering fonts.
- 4. Graphics and logos.
- 5. Any other characteristic or unifying sign elements desired by the applicant.

Prior to issuance of a sign permit for any parcel, a "Parcel Sign Plan" for that parcel shall be submitted to and approved by the Planning Director. For the purposes of this subsection, a parcel may be an entire residential subdivision, mixed-use development, non-residential development, or phase of any of the foregoing for which a Parcel Sign Plan is approved. A Parcel Sign Plan may be included with the applicable development plan. Each Parcel Sign Plan shall address the following:

- 1. Locations, which may include off-premises locations.
- 2. Design drawing showing sign dimensions.
- 3. Lighting.
- 4. Landscaping.
- 5. Supporting Structures.
- 6. Any other characteristic or unifying sign elements desired by the applicant.

Prior to issuance of a sign permit for any icon sign in Chatham Park, an Icon Sign Plan for Chatham Park shall be submitted to and approved by the Planning Director. The Icon Sign Plan shall address the following, as applicable:

- 1. Proposed locations, which may be modified from time to time as approved by the Planning Director.
- 2. Number of icon signs, which may change from time to time as approved by the Planning Director.
- 3. Sizes of icon signs.
- 4. Colors.
- 5. Materials.
- 6. Any other characteristics or unifying elements desired by the applicant, except for the content of any sign.

# Section 3. Signs Allowed in Chatham Park

Table 3.1 below lists signs that are allowed in Chatham Park by sign type and land use designation.

**Table 3.1:** 

P= allowed with permit X= not allowed  $\sqrt{}=$  allowed without permit

	Sign Type	Conditions	Resident ial Uses	Commercial Uses	Industrial Uses	Office & Institutional	Illumination
	Permanent				ı	L	L
Α	Awning	Sec 4 (A)	X	P	P	P	YES
В	Permanent Building	Sec 4 (B)	√	V	√	V	YES
С	Non-Commercial Off- Premises	Sec 4 (C)	Р	P	P	Р	YES
D	Building Directory	Sec 4 (D)	X	P	P	P	YES
Е	Ground Directory	Sec 4 (E)	P	P	P	P	YES
F	Flag -Commercial -Non-Commercial	Sec 4 (F)	P √	P √	P √	P √	YES YES
G	Gas Station	Sec 4 (G)	X	V		X	YES
Н	Governmental	Sec 4 (H)	√	√	<b>√</b>	V	YES
I	Health/Hospital	Sec 4 (I)	X	X	X	P	YES
J	Incidental	Sec 4 (J)	$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	YES
K	Marquee	Sec 4 (K)	X	P	X	X	YES
L	Drive-Thru	Sec 4 (L)	X	P	X	X	YES
M N O	Principal Ground:	Sec 4 (M) Sec 4 (N) Sec 4 (O)	X P Y	P X X	P X X	P X X	YES YES YES
P	Suspended	Sec. 4(P)	X	P	P	P	YES
Q	Wall	Sec 4 (Q)	X	P	P	P	YES
R	Icon	Sec 4 (R)	P	P	P	P	YES
S	Home Occupation	Sec 4 (S)	P	X	X	X	NO
	Temporary						
A	Construction/Development -Non-residential or mixed use	Sec 5 (A)1	P	P	P	P	NO
	- Residential	Sec 5 (A) 2	P	P	P	P	NO
В	Contractor	Sec 5 (B)	√	√	√	$\sqrt{}$	NO
C	Commercial	Sec 5 (C)	X	P	P	P	NO
D	Non-Commercial	Sec 5 (D)	√	√	V	V	NO
E	Off-Premises	Sec 5 (E)	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	NO
F	Use Change and Future Use	Sec 5 (F)	X	P	P	P	NO
G	Public Notice	Sec 5 (G)	<b>√</b>	V	√	$\sqrt{}$	NO
Н	Real Estate	Sec 5 (H)	<b>√</b>	V	√	√	NO
I	Window	Sec 5 (I)	X	V	√	V	NO
J	Sandwich Board	Sec 5 (J)	X	V	X	V	NO
K	Icon	Sec 5 (K)	P	P	P	P	YES

## Section 4. Permanent Signs

Permanent signs shall meet the specific requirements of this Element for the type of permanent sign and all other applicable requirements of this Element and other applicable Additional Elements (e.g., Master Lighting Plan Additional Element).

#### A. Awning

An awning sign is a material such as fabric, metal, flexible plastic, or vinyl that is supported by or attached to a frame and that extends from the exterior wall of a building without ground-mounted support.

Awning signs shall comply with the following requirements:

- 1. On a single-occupant property, one (1) awning sign may be allowed only in lieu of all other signage otherwise allowed on the wall to which the awning is attached.
- 2. On a multi-occupant property, one (1) awning sign may be allowed over each occupant entrance, in lieu of other wall signs.
- 3. The maximum area of an awning sign shall not exceed ten (10) percent of the total awning face front or side area.
- 4. Awning signs may be illuminated only with direct surface lighting and not with any form of backlighting, and otherwise are subject to the provisions of the Chatham Park Master Lighting Plan Additional Element.



Figure 4(A): Example of an awning sign

#### B. Permanent Building Sign

Permanent building signs shall comply with the following requirements:

- 1. Such sign(s) shall not exceed one (1) on any single building;
- 2. Such sign(s) shall not exceed three (3) square feet in area;



Figure 4(B): Examples of permanent building markers.

#### C. Non-Commercial Off-Premises Sign

A non-commercial off-premises sign is a sign that contains non-commercial copy. A non-commercial off premises sign shall comply with the following requirements:

- 1. Not to exceed three (3) signs per organization.
- 2. No sign shall be located closer than fifteen (15) feet to any public right-of-way.
- 3. No sign shall exceed two (2) square feet in size and four (4) feet in height.
- 4. No sign shall be displayed in connection with a commercial promotion.
- 5. The owner of the property on which the sign is displayed has given written permission.

#### D. Building Directory Sign

A building directory sign is a sign on the exterior wall of a building that may be used to list tenants or occupants of a building or project with unit numbers, arrows or other identifying or directional information, though any noncommercial copy is permissible.

Building directory signs on non-residential multi-tenant buildings are allowed if they comply with the following requirements:

- 1. Such signs are limited to one (1) per building entrance not to exceed two (2) per building.
- 2. The total size of the building directory sign does not exceed ten (10) square feet.

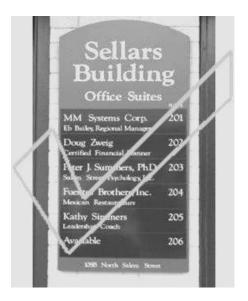


Figure 4(D): Example of a building directory sign

#### E. Ground Directory Sign

A ground directory sign is a sign with a continuous base less than two (2) feet in height that may be used to list tenants or occupants of a building having more than one tenant or project with unit numbers, arrows or other identifying or directional information, though any noncommercial copy is permissible. A ground directory sign shall comply with the following requirements:

#### 1. Non-residential

- a. Signs internal to the site within a mixed use development shall be located not less than fifty (50) feet measured perpendicular from any vehicular entrance public right-of-way and at principal intersections within the site, where such intersections are not less than fifty (50) feet from any public right-of-way as shown on an approved Parcel Sign Plan.
- b. Such signs shall not exceed twenty (20) square feet in area and forty-eight (48) inches in height.
- c. Such signs shall not be located within a required buffer (as that term is defined in the Master Open Space Plan Additional Element).
- d. Such signs may contain logos or business names with arrows or other directional information but shall not contain any other commercial copy.

e. Such signs may be internally or externally lighted in accordance with Sec. 8 (2), Sign Illumination

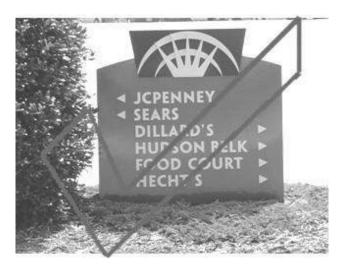


Figure 4(E): Example of non-residential ground directory sign.

#### 2. Multi-Family Residential

- a. One (1) ground directory sign may be located near the principal entrance to a parking area for multi-family projects, as shown on an approved Master Signage Plan.
- b. Such sign shall be located away from any public right-of-way, so that drivers can conveniently pull up and read the sign without impeding traffic on any driveway or entrance serving the development.
- c. There are no limitations on the amount of information that may be included in such sign, as long as the sign meets all of the other applicable requirements.
- d. Such sign shall not exceed eight (8) square feet in area and five (5) feet in height.
- e. Such sign may be internally or externally lighted.

## F. Flag

A flag is a sign consisting of a single piece of fabric that is attached on one or two sides to one or more poles or other fixed structures so that the fabric can be blown by the wind.

Flags shall comply with the following requirements:

- 1. A maximum of two (2) flags shall be allowed per flag pole or other fixed structure to which the flags are attached. A maximum of three (3) flag poles shall be allowed.
- 2. A flag pole or other fixed structure to which flags are attached shall not exceed 30 feet in height nor shall flags on these poles or structures exceed a size of five (5) feet by eight (8) feet.
- 3. No building mounted flag or flag pole shall extend above the roofline.

Flags shall not be faded, tattered or torn at the time of installation and flags that become faded, tattered, or torn shall be removed or replaced promptly after such condition occurs.

## G. Gas Station Sign

Signs at gasoline stations shall comply with the following requirements:

- 1. Signs located and secured to each pump island shall not exceed nine (9) square feet.
- 2. A changeable copy sign, not to exceed nine (9) square feet, may be included on the principal ground sign (not to exceed the total square footage shown in Table 3.1) if a principal ground sign is allowed. LED lights may be used to provide changeable copy on either a principal ground sign or on the gasoline canopy, but not both.
- 3. An official North Carolina vehicle inspections sign shall be allowed provided said sign does not exceed four (4) square feet. In lieu of such a sign, a sign of the same dimensions may be displayed with other copy.
- 4. Signage and logos on pump island canopies are restricted to a maximum of ten (10) percent of the face of the canopy.

## H. Governmental Sign

Governmental signs are signs posted by local, state, or federal agencies on public property, within a public right-of-way or publicly dedicated easement, or in another location authorized by an applicable statute, ordinance, or governmental regulation.

## I. Health/Hospital Sign

Health/hospital signs are permanent signs erected and maintained by a hospital or by healthcare facility with or without an emergency department.

Health/hospital signs shall comply with the following requirements:

- 1. Principal ground signs shall be allowed provided that:
  - a. Not more than one (1) principal ground sign is allowed at each Major Entrance.
  - b. Maximum height is six feet (6').
  - c. Maximum size is seventy (70) square feet.
- 2. In addition to principal ground signs, emergency department ground signs shall be allowed subject to the following:
  - a. One emergency department ground sign is allowed at each Major Entrance to the facility. Provided, however, if the primary entrance to the emergency department is not located at a Major Entrance, an emergency department ground sign also is allowed at the primary entrance to the emergency department.
  - b. Maximum height is eight feet (8').
  - c. Maximum size is eighty (80) square feet.

#### 3. Wall signs shall be allowed provided that:

- a. The sign surface area of a sign located on a wall of a structure may not exceed the lesser of ten (10) percent of the total surface area of the wall on which the sign is located or thirty-four (34) square feet. The emergency department band shall not be counted in calculating the square footage of the wall sign.
- b. No wall sign attached to a building may project more than twelve (12) inches from the building wall.

## 4. Directory ground signs shall be allowed provided that:

- a. Maximum height is four feet (4').
- b. Maximum sign face size is twenty-four (24) square feet.
- c. Such signs may contain logos or business names with arrows or other directional information, though any noncommercial copy is permissible.
- d. Such signs may be internally or externally lighted.
- e. Such signs shall be located at a distance or orientation so as not to be legible from a public street right-of-way. If this is not feasible, the signs can be located as close as fifty feet (50') measured perpendicular from the nearest public street right-of-way.

#### J. Incidental Sign

An incidental sign is a sign with copy that only: (i) provides information to assist with direction or safety with respect to the premises on which it is located, such as signs that state "entrance," "exit," "one way," "telephone," "parking," "no parking," and similar instructions, (ii) provides information pertinent to the immediate safety or legal responsibilities of passersby or the public, such as signs warning of high voltage and "no trespassing" signs, or (iii) identifies the name and/or street address of the structure or occupant.

- 1. Such signs shall not include commercial copy.
- 2. The size of an incidental sign shall not exceed two (2) square feet or four (4) feet in height.
- 3. Signs notifying persons that motor or other vehicles may be towed from a private parking lot shall be no less in size than the minimum, and no greater in size than the maximum, required or allowed by applicable statute or ordinance.



Figure 4(J): Example of an incidental sign posted upon private property relating to private parking.

### K. Marquee Sign

A marquee sign is a theater or performance venue wall sign designed to have changeable copy.

Marquee signs shall comply with the following requirements:

- 1. A changeable copy sign shall cover not more than one (1) square foot of sign area for each linear foot of theater building frontage.
- 2. Non-electric copy only.
- 3. Such signs shall be subject to total wall sign area limits and be affixed to the wall.



Figure 4(K): Example of marquee sign with changeable copy

### L. Drive-Thru Sign

A drive-thru sign is an accessory sign adjacent to the driveway or walkway used by patrons of a drive-thru window or walk-up window. Drive-thru signs shall comply with the following requirements:

Changeable copy shall be allowed provided that:

- 1. Such signs shall not exceed thirty-two (32) square feet in area and six (6) feet in height.
- 2. Two (2) signs shall be allowed per drive-through lane.
- 3. Such signs shall not be legible from a public street right-of-way.
- 4. Such signs may be internally and externally illuminated.

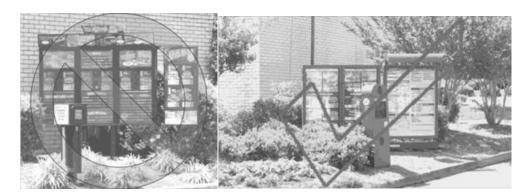


Figure 4 (L) 1: The menu board sign on the left is too large, whereas the sign on the right meets the requirements above.

#### M. Principal Ground: Non-Residential Sign

A non-residential principal ground sign is a sign supported permanently upon the ground by a continuous base or two (2) or more support posts at the outside edge, not attached to any building and meeting the conditions below. If supported by posts, the bottom of the sign shall be located no more than two (2) feet above grade:

Non-residential principal ground signs shall comply with the following size and height requirements:

 Street Frontage
 Max. Sign Size (sq ft) (per side)
 Max. Height (ft)

 <200 feet</td>
 20
 4

 ≥200 feet & <400 feet</td>
 30
 5

 ≥ 400 feet & <1000 feet</td>
 40
 6

 ≥1000' feet (see note below)
 50
 10

**Table 4.1: Ground signs** 

Note: The 1000 feet street frontage signage provisions above shall only apply to mixed use developments.

- 1. Single Use Parcel that is not part of a Mixed Use Parcel:
  - a. A single use parcel that is not part of a mixed use parcel shall be allowed one (1) principal ground sign at each Major Entrance. Provided, however, if the parcel is located at the intersection of two public streets and has a Major Entrance from each street, at the election of the parcel owner the principal ground sign may be located on the corner instead of at each Major Entrance.

- b. If there is no Major Entrance, then one (1) principal ground sign is allowed at a location shown on the approved development plan or Parcel Sign Plan
- c. A business located on a corner with a Major Entrance on each road may elect to have one (1) principal ground sign on the corner instead of a sign at each Major Entrance.
- d. A principal ground sign may be located in the median of a Major Entrance where the median is a minimum of fifty (50) feet long and ten (10) feet wide, provided that the sign is not located closer than ten (10) feet to either end of the median.
- e. A principal ground sign may be placed in the streetscape buffer for the parcel that is in close proximity to a Major Entrance, as shown on either the approved development plan or approved Parcel Sign Plan.
- f. A principal ground sign may be internally and externally illuminated.

#### 2. Mixed Use Development

A Mixed Use Development is a group of two (2) or more uses, businesses, or parcels planned and developed in a joint manner, whether or not governed by a common property owners' association or by common conditions, covenants, and restrictions.

Principal ground signs for a Mixed Use Development shall comply with the following requirements:

- a. One (1) principal ground sign shall be allowed at each Major Entrance or in close proximity to that Major Entrance.
- b. A principal ground sign may be placed in the streetscape buffer for the parcel that is in close proximity to a Major Entrance, as shown on either the approved development plan or approved Parcel Sign Plan.
- c. A principal ground sign may be located in the median of a Major Entrance where the median is a minimum of fifty (50) feet long and ten (10) feet wide, provided that the sign is not located closer than ten (10) feet to either end of the median.
- d. A principal ground sign may be mounted on a fence or wall that does not exceed the height and size parameters set forth in Table 4.1.
- e. A principal ground sign may be internally and externally illuminated.



Figure 4(M): Example of a non-residential principal ground sign.

#### N. Principal Ground: Residential Sign

A residential principal ground sign is a sign supported permanently upon the ground by a continuous base or two (2) or more support posts at the outside edge, and not attached to any building. If supported by posts, the bottom of the sign shall be located no more than two (2) feet above grade.

Principal residential ground signs also shall comply with the following requirements:

- 1. A maximum of two (2) principal ground signs is allowed at each vehicular entrance.
- 2. A principal ground sign may be placed in the streetscape buffer for the parcel that is in close proximity to a Major Entrance, as shown on either the approved development plan or approved Parcel Sign Plan.
- 3. In lieu of one (1) or two (2) principal ground signs on each side of the street at a vehicular entrance, a principal ground sign may be located in the median of a vehicular entrance where the median is a minimum of fifty (50) feet long and ten (10) feet wide, to either end of the median.
- 4. A principal ground sign shall not exceed a total of forty (40) square feet.
- 5. A principal ground sign may be mounted on a fence or wall that does not exceed eight (8) feet in height; however, the sign itself may not exceed the size limitations set forth in this subsection and the sign must be only an incidental part of the wall or fence design.
- 6. If illuminated, the principal ground sign shall be shall be externally illuminated only.



Figure 4(N): Example of a Residential Subdivision Ground Sign

## O. Principal Ground: Multi-Family Residential Off-Premises Sign

A multi-family residential off-premises principal ground sign is a sign supported permanently upon the ground by a continuous base or two (2) or more support posts at the outside edge, and not attached to any building. If supported by posts, the bottom of the sign shall be located no more than two (2) feet above grade. For the purposes of this subsection, "multi-family" is defined as a development that contains attached housing, such as apartments, condominiums, and townhouses.

Multi-family residential off-premises principal ground signs also shall comply with the following requirements:

- 1. A maximum of one (1) multi-family off-premises principal ground sign is allowed per multi-family development.
- 2. A multi-family off-premises principal ground sign may be placed in the streetscape buffer for the parcel on which the sign is located, as shown on either the approved development plan or approved Parcel Sign Plan.
- 3. A multi-family off-premises principal ground sign shall not exceed a total of forty (40) square feet.
- 4. A multi-family off-premises principal ground sign may be mounted on a fence or wall that does not exceed eight (8) feet in height; however, the sign itself may not exceed the size limitations set forth in this subsection and the sign must be only an incidental part of the wall or fence design.
- 5. If illuminated, the multi-family off-premises principal ground sign shall be shall be externally illuminated only.
- 6. The owner of the property on which the multi-family off-premises principal ground sign is displayed has given written permission.

#### P. Suspended Sign

A suspended sign is a sign that is suspended from the underside of a horizontal plane surface and is supported by such surface.

Suspended signs shall comply with the following requirements:

- 1. Suspended signs shall not exceed one (1) per exterior doorway entrance on the ground floor of the building or one (1) building entrance or occupant, whichever is less.
- 2. A suspended sign shall not exceed two (2) square feet in total area.
- 3. Suspended signs shall not be externally or internally illuminated.
- 4. Suspended signs may be in addition to wall signs allowed by this Element.



Figure 4(O): Example of a Suspended Sign

## Q. Wall Sign

A wall sign is a sign attached on or parallel to a wall, professionally painted on the wall surface or erected and confined within the limits of an outside wall of any building or structure, which is supported by such wall or building.

Wall signs shall comply with the following requirements:

- 5. The sign surface area may not exceed ten (10) percent of the total surface area of the wall on which the sign is located.
- 6. Buildings containing one business or other use with a front façade 600 feet in length or greater may install wall-mounted directional signs that identifies the business or use and directs to the building's entrance or entrances, though any noncommercial copy may be substituted. Such signs are limited to two per front façade and 100 square feet each.
- 7. No wall sign attached to a building may project more than 12 inches from the building wall.

#### R. Icon Sign

Icon signs shall comply with the icon sign plan. An icon sign, in addition to identifying Chatham Park, also may identify one or more specific businesses, uses, or services provided or to be provided in Chatham Park.

#### S. Home Occupation Sign

Signs on properties with home occupations shall comply with the following requirements:

- 1. Plastic and/or acrylic sign faces are prohibited.
- 2. A home occupation sign attached to the dwelling, detached garage, or outbuilding is allowed provided that:
  - a. The sign shall be no larger than 12 inches by 12 inches;
  - b. The sign shall be placed no higher than 6' at an entrance door to the dwelling, detached garage, or outbuilding; and
  - c. The sign shall not be internally lit; external lighting shall be limited to traditional residential lighting fixtures.
- 3. Where a home occupation exists on a lot with a minimum of 300 feet of linear road frontage, one sign may be placed in the front yard, provided:
  - a. The sign shall be no larger than 18 inches by 24 inches;
  - b. The maximum height of the sign shall be 4 feet;
  - c. The sign shall not be internally lit;
  - d. The sign must be permanent and affixed to a permanent pole(s); and
  - e. The sign shall not be located in the street right-of-way and must be located so that it does not obscure vision at driveway sight triangles.

## Section 5. Temporary Signs

#### A. Construction/Development Sign

A construction/development sign is a temporary sign located on a property where active construction or development is occurring.

A temporary construction/development sign shall comply with the following requirements:

- 1. Non-Residential or Mixed-Use (including both non-residential and residential uses) Construction/Development signs:
  - a. Limited to one (1) sign per site.
  - b. No such sign shall exceed sixty-four (64) square feet and five (5) feet in height.
  - c. Permits for such signs shall expire upon the earlier of the issuance of a certificate of occupancy for the project or twelve (12) months from the date of issuance of the permit for the project's development. If a certificate of occupancy for the project has not been issued prior to the expiration of the original permit for the sign, the permit for the sign may be renewed once for an additional period that expires upon the earlier of issuance of a certificate of occupancy for the project or twelve (12) months from the renewal date for the sign permit.
  - d. Preliminary development plan approval is required prior to issuance of the sign permit.
  - e. The sign shall be removed within ten (10) days immediately following issuance of a certificate of occupancy for the project or earlier expiration of the sign permit.
- 2. Residential Construction/Development signs shall be allowed provided that:
  - a. Limited to one (1) sign per residential development, to be located at an entrance to the development.
  - b. No such sign shall exceed thirty-two (32) square feet and five (5) feet in height.
  - c. Preliminary development plan approval is required prior to issuance of the sign permit.
  - d. The sign shall be removed no later than ten (10) days immediately following the date that one hundred (100) percent of the lots within the residential development have initially been sold to an owner other than the developer or a builder. Provided, however, with respect to residential dwelling unit rental projects, the sign shall be removed no later than issuance of the first certificate of occupancy for the project.

#### B. Contractor Sign

One or more temporary contractor signs are allowed on any site where a contractor is performing work on or with respect to the real property, such as but not limited to painters, building contractors, roof cleaners, and landscapers.

A contractor sign is a sign that identifies a contractor, subcontractor, material supplier, or equipment supplier by name and also may identify the type of product or service provided by the contractor. A

contractor sign shall comply with the following requirements:

- 1. A contractor sign shall not exceed five (5) square feet and four (4) feet in height.
- 2. The number of signs shall not exceed one (1) sign per contractor per site.
- 3. The sign may be displayed during the time that any service or work is being performed on the site and shall be removed from the site on or before the earlier of the tenth (10th) days after all service or work is completed or one (1) year from the time it is first displayed on the site. A replacement sign for a contractor sign is considered to be the same sign for the purposes of calculating the one (1) year period.



Figure 5(B): Example of a contractor sign.

#### C. Commercial Sign

A temporary on-site sign or banner containing commercial copy may be erected or placed to coincide with an event if it complies with the following requirements:

- 1. Only one (1) such sign or banner shall be allowed at any one time
- 2. The sign or banner shall not exceed sixteen (16) square feet and four (4) feet in height.
- 3. The sign or banner may be erected no earlier than one (1) week before the event begins and must be removed within forty-eight (48) hours after the event ends. Such temporary signs or banners may be displayed on a particular property for no more than sixty (60) total days during any calendar year.
- 4. The sign or banner may be located in the public right-of-way, but outside of the sight triangles, with permission from the governmental body with authority over the right-of-way.



Figure 5(C): Example of a temporary event for profit sign.

#### D. Non-Commercial Sign

#### **On-Site**

Temporary on-site signs and banners containing non-commercial copy may be erected or placed to coincide with a non-commercial event if they comply with the following requirements:

- 1. Up to three (3) such signs or banners are allowed at any one time. The maximum height of any such sign or banner is five (5) feet, the square footage of any one sign or banner shall not exceed thirty-two (32) square feet, and the total square footage of all signs and banners shall not exceed thirty-two (32) square feet.
- 2. The signs or banners may be erected no earlier than four (4) weeks before the date (or beginning date) of the event and must be removed within one (1) week after the date on which the event ends. Temporary signs or banners may be displayed on a particular property for no more than sixty (60) total days during any calendar year.
- 3. The signs or banners may be located in a public street right-of-way, but outside of the sight triangles, with permission from the governmental body with authority over the public street right-of-way.
- 4. If a sign display area is permanent but the copy displayed is subject to changes, then the sign shall be regarded as a permanent sign and, to be allowed, must meet the applicable requirements for a permanent sign.

#### E. Off-Premises Sign

Temporary off-premises signs and banners may be erected or placed to coincide with a non-profit event if they comply with the following requirements:

1. Such signs and banners shall be limited to a total of thirty (30) at any one time. No sign or banner shall exceed five (5) square feet in size and four (4) feet in height.

- 2. The signs or banners may be erected no earlier than one (1) week before the event begins and must be removed within forty-eight (48) hours after the event ends. Such temporary signs or banners may be displayed on a particular property for no more than sixty (60) total days during any calendar year.
- 3. Written permission from the property owner(s) shall be obtained prior to display of any sign or banner.
- 4. The signs or banners may be located in the public right-of-way, but outside of the sight triangles, with permission from the governmental body with authority over the right-of-way.

## F. Use Change Sign and Future Use Sign

## **Grand Opening/Closing**

For a total of sixty (60) days, collectively, before and/or after a business, use, or service initially begins operating or permanently ceases operating on a site, a temporary sign shall be allowed on that site that complies with the following requirements:

- 1. Only one (1) such sign per business, use, or service is allowed.
- 2. The sign shall not exceed thirty-two (32) square feet in size.
- 3. The sign shall not be displayed for more than a total of sixty (60) days.



Figure 5(F): Example of a grand opening sign.

#### **Future Use**

On a site where a business, use, or service is expected to begin operating in the future, a temporary sign shall be allowed if it complies with the following requirements:

- 1. Only one (1) sign (single-sided or double-sided) per business, use, or service is allowed.
- 2. Each side of the sign shall not exceed thirty-two square feet in size and the sign shall not exceed ten (10) feet in height.
- 3. The sign may be located on the proposed site or, with the consent of the property owner, within 2,000 feet of the proposed site.
- 4. The permit for such a sign shall be limited to the earlier of issuance of a certificate of occupancy for the project or twelve (12) months from the date of issuance of the permit for the project's development. If a certificate of occupancy for the project has not been issued by the expiration of the original permit for the project's development, the sign permit may be renewed twice for additional periods of twelve (12) months each. Each renewal sign permit expires upon the earlier of issuance of a certificate of occupancy for the project or twelve (12) months from the renewal date for the sign permit.

#### G. Public Notice Sign

A public notice sign is a sign advertising official notices or advertisements posted by or under the direction of a governmental authority, court, statute, or ordinance. A public notice sign may be of any size or color, and may be displayed for such period of time as necessary to meet the applicable requirements of the governmental authority, court, statute, or ordinance.

## H. Real Estate Sign

A real estate sign is a sign located upon real estate that is for rent, lease or sale. A real estate sign shall comply with the following requirements:

- 1. Single family, duplex, triplex, quadplex, townhome, condominium, or other residential lot or unit, excluding apartments:
  - a. A maximum of one (1) real estate sign per lot or unit for sale or lease.
  - b. A maximum of one (1) additional real estate sign per lot or unit that may be displayed no more than thirty-six (36) hours during any calendar week.
  - c. Such signs shall not exceed five (5) square feet in size and four (4) feet in height and shall be located on the property for sale or lease. The signs shall be removed within two (2) weeks after the date on which the closing of the sale occurs or the lease is executed or the marketing of the property stops. Signs are not allowed off-premises or in open space or common areas.
- 2. Signs indicating one or more apartments for lease:
  - a. A maximum of one (1) real estate sign may be displayed at each entrance to the apartment site from a public or private street.
  - b. A maximum of one (1) additional real estate sign per entrance may be displayed no more than thirty-six (36) hours during any calendar week.

- c. Such signs shall not exceed five (5) square feet in size and four (4) feet in height and shall be located on the apartment site. Such signs may be displayed only when there are one or more apartments available for lease. Signs are not allowed off-premises or in open space or common areas.
- 3. Signage on a lot being used as a residential subdivision sales center or model home.
  - a. One (1) sign, not to exceed sixteen (16) square feet in size and five (5) feet in height is allowed on a lot on which a sales center or model home is located. For a lot with a sales center, the sign shall be removed not later than ten (10) days after 100% of the properties within the residential development have initially been sold to an owner other than a builder of residential dwellings in that development. For a lot with a model home, the sign shall be removed not later than ten (10) days after the builder who owns the lot and dwelling that is serving as the model home has sold all lots in the development that are owned by that builder, including the lot on which the model home is located. A model home that also is serving as a sales center is allowed one (1) sign that meets the requirements of this subsection.
  - b. Directional signs that direct traffic to a sales center or model home are allowed at the street intersection closest to each entrance to the development and at each intersection within the development that might reasonably be excepted to be used by someone traveling from one of the development's entrances to the sales center or model home. Such directional signs shall be a maximum of four (4) square feet in size and four (4) feet in height. All such directional signs shall be removed within same time as the removal of signs for the sales center or model home with which such directional signs are associated.

#### 4. Non-residential.

A maximum of one (1) real estate sign per lot or business space for sale or lease is allowed. These signs shall be a maximum of thirty-two (32) square feet in size and ten (10) feet in height and shall be located on the lot or business space for sale or lease. The sign shall be removed when the lot or business space is sold or leased, as applicable, or when the property ceases to be marketed. These signs are not allowed off-premises or in open space or common areas.

#### I. Window Sign

A window sign is any sign placed inside a window or door and that is visible from the exterior. Window signs shall comply with the following requirements:

1. The sign shall be allowed on the show window glass of non-residential buildings provided that such temporary signs, together with all permanent signs, do not exceed a combined maximum of 25 percent of the total window area per building side.

## J. Sandwich Board Sign

A sandwich board sign is a sign consisting of two panels joined together at the top and configured in the shape of an inverted "V" so that the bottom of the sign rests upon or near the ground. Sandwich board signs shall comply with the following requirements:

- 1. The total area of the signboard (including both sides) shall not exceed fourteen (14) square feet.
- 2. A sandwich board sign shall not exceed two (2) linear feet in width and forty-two (42) inches in height. The sign need not have a standard geometric shape, such as a square or rectangle.
- 3. The sign may not be made of rough cut plywood.
- 4. The sign shall be located within six (6) feet of the main entrance to a business or other use or establishment, and its location shall not interfere with pedestrian or vehicular circulation;
- 5. The sign shall be removed when the business, use, or establishment closes for the day.
- 6. Any person erecting a sandwich board sign shall indemnify and hold harmless the Town of Pittsboro and its officers, agents, and employees from any claim or cause of action arising out of the presence of the sign on Town property or public right-of-way. This indemnification shall include the costs of defending against any such claim or cause of action, including reasonable attorneys' fees.

## K. Icon Sign

A temporary icon sign is an icon sign, the permit for which shall last for twelve (12) months from the date of its issuance but that may be renewed for two (2) successive periods of twelve (12) months each. Temporary icon signs shall comply with the icon sign plan.

# Section 6. Prohibited Signs

The following signs are expressly prohibited in Chatham Park, unless otherwise indicated in this Section or allowed in other Sections of this Element:

- 1. Signs within the public right-of-way, except for signs placed in a public right of way by a governmental entity or an authorized utility provider.
- 2. "Off-premises signs", as defined in the Definitions Section of this Element.
- 3. Any sign located in a "sight triangle", as defined in the Definitions Section of this Element
- 4. Signs that imitate traffic control devices or that might reasonably be confused for traffic control devices.
- 5. Signs not maintained in accordance with Section 8.3 of this Element.
- 6. "Portable signs", as defined in the Definitions Section of this Element.

- 7. "Animated Signs" or "Attracting Devices", as defined in the Definitions Section of this Element, except that banners with non-commercial copy displayed on residential property by the resident are allowed. Banners are allowed only in accordance with the specific authorizations provided in the Section of this Element dealing with Temporary Signs.
- 8. Signs comprised in whole or in part of exposed neon tubing. This requirement shall not prohibit the use of neon tubing when it is fully contained within a sign fixture or element thereof, or if it is a two (2) square foot or smaller sign.
- 9. "Pole signs" as defined in the Definitions Section of this Element.
- 10. "Billboards" as defined in the Definitions Section of this Element.
- 11. "Changeable copy" as defined in the Definitions Section of this Element, except for the following that otherwise comply with the requirements of this Element for those signs: gas station signs; drive-thru signs; and marquees. Provided, however, the prohibition with respect to changeable copy will not prevent modifications to the text of a sign to reflect a change of circumstances or factual information.
- 12. "Series signs" as defined in the Definitions Section of this Element.
- 13. Box-style signs with internally-illuminated backgrounds. Provided, however, individually illuminated letters are acceptable.
- 14. Exposed LED signs with the exception of LED signs to the extent allowed in a gas station sign.
- 15. Pavement markings for purposes other than traffic control.
- 16. Signs that contain language and/or pictures obscene to the general public in accordance with NCGS § 14-190.1.
- 17. Signs placed on private property without consent from the property's owner or from someone else with authority to consent to the sign.
- 18. Signs on vehicles parked in locations visible to the public where the principal use of the vehicles is not for transportation.

# Section 7. Sign Area Measurement

#### Sign Surface Area Measurement

The surface area of a sign shall be measured in accordance with the definition of "Sign Surface Area" in the Definitions Section of this Element.

#### **Double Faced Signs**

- 1. Only one side of a sign surface area of a double faced, back-to-back sign shall be included in the surface area measurement.
- 2. A double-faced sign with non-parallel faces shall be regarded and calculated as two signs.

## Section 8. Sign Permitting, Illumination, Maintenance and Landscaping

## 1. Procedure for Obtaining a Sign Permit

- a. Application for a sign permit, where required by this Element, shall be made to the Planning Director. Application for a sign permit may be made as part of a development plan or separately.
- b. A sign permit shall become null and void if the sign is not erected within eighteen (18) months from the date of issuance of the permit. Provided, however, upon written request of the holder of the sign permit, the Planning Director may extend the sign permit for an additional six (6) months.
- c. If the sign or signs proposed in an application meet the requirements of this Element, then the Planning Director shall issue the sign permit.
- d. Construction or placement of a sign requiring a permit shall not be commenced until the permit therefor has been issued and all other applicable construction permits have been issued.

#### 2. Sign Illumination

Unless otherwise prohibited by this Element, signs may be illuminated if such illumination is in accordance with this Element and the Master Lighting Plan Additional Element. All electric signs shall be in accordance with the Chatham Park Lighting Element, the Building and National Electric Code and shall be subject to all required building permits. All wiring to ground signs or to lighting equipment erected after this Element is approved by the Town must be underground.

- a. Signs near residential premises. No sign within 150 feet of a residential premise may be illuminated between the hours of midnight and 6 a.m., unless there is no spillover of lighting or glare to the residential area beyond the boundaries of the lot where the lighting is located.
- b. *Shielding of lights*. External lighting directed toward a sign shall be shielded so that it illuminates only the face of the sign and does not shine directly into or cause glare onto a public right-of-way or residential premises other than the residential premises on which the sign is located.
- c. Flashing or intermittent lights. No sign shall contain or be illuminated by flashing or intermittent light or lights of changing degrees of intensity. Provided, however, this requirement is not applicable to any sign dealing with public safety that is displayed by or on behalf of a governmental authority or utility provider.

#### 3. Sign Maintenance

- a. *Maintenance of signs*. All signs and all components thereof, including but not limited to supports, braces, and anchors, shall be designed, constructed, and maintained to retain sound structural condition. They shall be kept safe and in good repair, free of deterioration or missing parts, and at all times shall comply with all applicable provision of the State Building Code, all applicable electrical codes, and this Element at all times.
- b. *Removal of sign copy*. If a sign's copy is removed, leaving only the supporting "shell" of a sign or the supporting braces, anchors, or similar components, the owner of the sign, the lessee of the sign, or the owner of the property on which the sign is located or other person

having control over such sign shall, within 60 days of the removal of the copy, either replace the copy or remove the remaining components of the sign.

## 4. Landscaping

A freestanding permanent sign shall include landscaping at the base of the sign. The landscaping shall be designed to include, but not limited to, one or more of the following: annual and/or perennial flower beds; ground cover; ornamental grass; and shrubs, and the landscaping shall comply with the applicable requirements of the Master Landscaping Plan Additional Element. Turf and other grasses are not allowed as part of the landscaping of the sign. Landscaping of the sign shall be in keeping with the adjacent area landscaping. The required landscaping shall be well maintained at all times.

## Section 9. Alternate Signs

At any location in Chatham Park the Town Board, in the exercise of its legislative authority, may approve a sign that varies in one or more respects from the provisions of this Element (an "Alternate Sign"), if it determines that the proposed sign or signs serve the best interests of the public and circumstances support approval.

For example, Villages and Section 7.1 of Chatham Park PDD are expected to contain a concentration of retail, restaurant, and entertainment uses that is conducive to variety and innovation in design treatments and approaches to signs in order to create vibrant, distinctive, and engaging gathering places. Distinctions between buildings and signs, methods of illumination, massing and size of signs, and architectural forms of signs are among the ways to achieve such variety and innovation. Examples of the types of signs that can provide variety and innovation in Chatham Park PDD are included following the Definitions Section of this Element (Figure 1).

#### Section 10. Definitions

#### **Animated Sign or Attracting Device**

Any sign that uses movement or change of lighting to depict action or create a special effect, scene, or attract attention, including beacons, pennants, hand-held signs, streamers, balloons or other inflatables used as signs, spot lights and search lights, high-intensity illuminated signs, or other moving or flashing signs.

#### **Bracket Sign**

A ground sign with one post and extending arm from which the sign hangs.

#### **Banner**

A temporary sign constructed of lightweight fabric or similar material such as, but not limited to vinyl, fabric, or paper.

#### Billboard

An off-premises outdoor advertising sign owned by a person or legal entity that engages in the business of selling the advertising or communicative space on that sign.

#### **Building Façade**

The entire area of a building facing or side extending from the roof or parapet to the ground and from one corner of the building to another, but does not include any structural or nonstructural elements which extend beyond the roof of a building.

## Canopy

A structure constructed of rigid materials, including but not limited to metal, wood, concrete, canvas, or glass, which is attached to and supported by a building, or which is free-standing and supported by column, poles, or braces extended to the ground.

#### **Changeable Copy**

A sign or portion of a sign with characters, letters, logos, or illustrations or other representations that can be changed or rearranged without altering the face or the surface of the sign.

#### **Commercial Copy**

Any copy that names or advertises a business, product, service or other commercial or for-profit activity.

#### **Copy** (permanent or temporary)

The wording or pictorial graphics on a sign surface either in permanent or removable form.

#### **Exterior Lighting**

Lighting, such as that used in and around buildings, recreation areas, parking lots, and signs designed to illuminate certain areas for visibility.

#### **Healthcare Facility**

Any facility where medical or healthcare services are provided.

## **Icon Sign**

A sign, structure, or work of art that, because of its location, size, and/or design, helps to create a sense of arrival or a permanent community identity or image for Chatham Park.

#### **Illuminated Sign**

A sign with an artificial light source incorporated internally or externally for the purpose of lighting the sign.

#### **Internal Illumination**

A light source concealed or contained within the sign itself, such as fluorescent or neon tubing, which lights the sign but where the light source is not visible.

## Logo

A graphic sign which represents a particular trademark or business symbol for identification.

#### **Major Entrance**

A vehicular full access point (left and right turns in and out) from which to enter and exit.

#### **Mechanical Movement**

Animation, revolution, rotation, or other movement of any or all parts of a sign.

## **Non-commercial Copy**

Any copy other than commercial copy.

#### **Off-premises Sign**

A sign that directs attention to a business commodity, service, or establishment conducted, sold, or offered at a location other than the premises on which the sign is erected or affixed.

## **On-premises Sign**

A sign that directs attention to a business commodity, service, or establishment conducted, sold, or offered on the premises on which the sign is erected or affixed.

#### **Pennant**

A lightweight plastic, fabric, or other material, whether or not containing a message of any kind, suspended from a rope, wire, string, or pole, usually in series, designed to move in the wind.

#### **Permanent Building Sign**

A sign made of permanent material, such as bronze or masonry, that is permanently affixed to or incorporated into the wall of a building.

#### Pole Sign

A sign that is not attached to a building, but is supported by a pole(s) or mast which has as its principal function the support of the sign.

#### Portable Sign

A sign that is not permanently affixed to a building, structure or the ground or other permanent

structure including but not limited to; sandwich board signs/A-frame, T-frame signs, products, costumed characters, hand-held signs, umbrellas that are not associated with a restaurant seating area, hot air or gas-filled balloons, or a sign designed to be transported, including, but not limited to the following: signs designed to be transported by means of wheels, signs attached to or painted on vehicles or trailers parked and visible from any public right-of-way.

## **Projecting Sign**

A sign affixed to a building or wall in such a manner that its leading edge extends more than 12 inches beyond the surface of said building or wall.

#### Sandwich Board Sign

A sign consisting of two panels joined together at the top and configured in the shape of an inverted "V" so that the bottom of the sign rests upon or near the ground.

## **Series Signs**

A series of two (2) or more signs along a public or private road, any two of which are less than one hundred (100) feet apart at their closest points.

#### **Sight Triangle**

A triangular-shaped portion of land established at street intersections and driveways in which nothing is erected, placed, planted, or allowed to grow in such a manner as to limit or obstruct the sight distance of motorists entering or leaving the intersection, as set forth in applicable legal requirements.

#### Sign

An identification, description, animation, illustration, or attention getting device, illuminated or non-illuminated, which directs attention to a product, service, place, activity, person, institution, performance, commodity, firm, business or solicitation, including permanently installed or situated merchandise or an emblem, insignia, logo, painting, banner, poster, bulletin board, pennant, placard, or temporary sign designed to identify or convey information.

#### **Sign Face**

The entire surface area of a sign upon, against, or through which copy is placed.

#### Sign Height

The vertical distance measured from the sign's average grade level, provided that no filling, berming, or mounding solely for the purpose of locating the sign at a higher level is done.

#### Sign Surface Area

The entire area of a sign shall be the area within a single, continuous eight-sided, straight-sided perimeter that encloses the entire sign inclusive of any border or trim and all the elements of the matter displayed, but excluding the base or apron, supports, and other structural members. In the case of three-dimensional or painted letters located directly on a wall surface, the surface area shall be defined as the combined area of the continuous eight-sided, straight-sided perimeter that encloses each individual letter.

## **Temporary Sign**

A sign that is used in connection with a circumstance, situation or event that is designed, intended, or expected to take place or to be completed within a definite period of time after the erection of such sign or is anticipated to occur in the future. If a sign display area is permanent but the copy displayed is subject to periodic changes, that sign shall not be regarded as temporary.





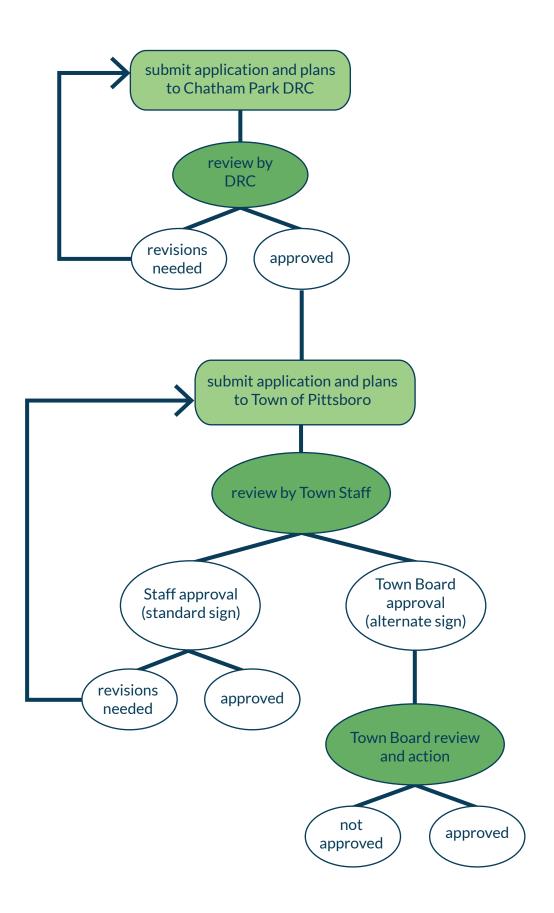






Figure 1

# DEVELOPMENT REVIEW PROCESS: SIGNAGE



# 8. Lighting Element

## Section 1. Purpose and Applicability

#### Purpose

The purpose of this Element is to provide regulations for outdoor lighting (also referred to in this Element as exterior lighting) that will:

- Permit the use of outdoor lighting that does not exceed the minimum levels specified in IES recommended practices for night-time safety, utility, security, productivity, enjoyment and commerce.
- Reduce adverse offsite impacts of lighting such as light trespass and obtrusive light.
- Curtail light pollution and reduce sky glow.
- Help protect the environment from the adverse effects of night lighting from gas or electric sources.
- Conserve energy and resources to the greatest extent reasonably practicable.

#### **Applicability**

Except as otherwise provided, the standards in this Element apply to all exterior lighting in Chatham Park in developments requiring approval of a site plan.

# Section 2. Lighting Plan

Each site plan submitted for approval by the Town shall include an exterior lighting plan that addresses all of the following:

- 1. Specifications for the lighting fixtures such as: type of unit (for example, cutoff classification, BUG rating, glare shields, etc.); lamps (wattage, etc.); electrical load requirements; utility company involved; method of wiring; routing/location of lines; number and location of lights; and mounting heights.
- 2. A horizontal point photometric grid that indicates foot-candle levels measured at grade across the site. The plan shall include information with respect to maximum, average, and minimum site foot-candles, uniformity ratio (average/minimum), and depreciation factors. Foot-candle levels must be shown as of the time of installation.
- 3. Plan certification by (i) a licensed lighting professional holding the PE, LC or CLEP certification or similar certification that indicates proficiency in the design of outdoor lighting, (ii) a lighting manufacturer, or (iii) the local electric utility. The certification must verify that the plans meet applicable design requirements and illumination standards of this Element.

## Section 3. Lighting Zones

The Lighting Zone shall determine the limitations for lighting as specified in this Element. The Lighting Zones shall be as follows:

#### LZ0: No ambient lighting

No ambient lighting is allowed in areas of undeveloped open space where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environment. Human activity is subordinate in importance to nature. The vision of human residents and users is adapted to the darkness in such areas, and they expect to see little or no lighting. When not needed, lighting should be extinguished.

## LZ1: Low ambient lighting

Low ambient lighting is allowed in areas of rural or low density (i.e. less than 3 residential units per gross acre) residential uses where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels in such areas. Lighting may be used for safety and convenience but it is not necessarily uniform or continuous. After dark, most lighting should be extinguished or reduced as activity levels decline.

#### LZ2: Moderate ambient lighting

Moderate ambient lighting is allowed in areas of medium to high density (i.e. more than 3 residential units per gross acre) residential uses outside of Activity Centers and Section 7.1. The vision of human residents and users is adapted to moderate light levels in such areas. Lighting may typically be used for safety and convenience but it is not necessarily uniform or continuous. After dark, lighting may be extinguished or reduced as activity levels decline.

#### LZ3: Moderately high ambient lighting

Moderately high ambient lighting is allowed in non-residential areas, mixed-use areas, Activity Centers, and Section 7.1, and in medium to high density (i.e. more than 3 residential units per gross acre) in non-residential areas, mixed-use areas, Activity Centers, and Section 7.1. The vision of human residents and users is adapted to moderately high light levels in such areas. Lighting is generally desired for safety, security and/or convenience and it is often uniform and/or continuous. After dark, lighting may be extinguished or reduced in most areas as activity levels decline.

## LZ4: High ambient lighting

High ambient lighting is allowed in manufacturing and industrial areas. The vision of human residents and users is adapted to high light levels in such areas. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform and/or continuous. After dark, lighting may be extinguished or reduced in some areas as activity levels decline.

#### Section 4. Illumination Standards

The tables below set forth standards for lighting intensity based upon the lighting zone and associated land use or activity involved. All light levels are measured at ground level. The specified minimum (Min.) FC value outlined in the following tables means that the lowest light level point or location in the applicable Land Use (Table 4.1) or applicable Location (Table 4.2) must not fall below the minimum (Min.) stated FC value or exceed the highest (Max.) FC value if a range is specified. An average to minimum uniformity of 4:1 means that the average FC to minimum (Min.) FC ratio cannot be worse (higher) than 4:1. The minimum (Min.) FC plus the uniformity ratio limits the highest amount of light allowed. Values must be calculated using the levels found within the lighted area; for example, a parking lot must be calculated using the levels found within the curb to curb or paved parking area only.

**Table 4.1 Lighting Standards for General Parking with Pedestrian Areas (foot-candles)** 

Lighting Zone	Land Use	Maintained Foot-candles	Uniformity Ratio (Average/minimum)
LZ4	-High intensity	0.2 Min. to 1.0 Max.	4/1
	- Manufacturing & Industrial		
LZ3	- Non-residential, Mixed-Use,	0.2 Min. to 0.9 Max.	4/1
	Activity Centers, and Section 7.1		
	- Retail		
	- Office		
	- Educational		
	- Cultural, civic, and		
	recreational		
	- Church or place of worship		
	- Medium to high density (i.e.		
	more than 3 residential units		
	per gross acre) residential uses		
LZ2	- Medium to high density (i.e. more	0.2 Min. to 0.5 Max.	4/1
	than 3 residential units per gross		
	acre) residential uses outside of		
	Activity Centers and Section 7.1.		
LZ1	- Rural or low density (i.e. less	0.1 Min. to 0.5 Max.	4/1
	than 3 residential units per gross		
	acre) residential uses		
LZ0	- Undeveloped open space	Not Applicable	Not Applicable

#### **Notes:**

- 1. Illumination levels are horizontal on the task, e.g. pavement or area surface
- 2. Uniformity ratios dictate that average illuminance values shall not exceed minimum values by more than the product of the minimum value and the specified ratio. For example, for LZ2, the average maintained foot-candles shall not be in excess of 2.0 (0.5 x 4).

**Table 4.2 Other Exterior Lighting Standards (foot candles)** 

Location	Maintained Foot-candles	Uniformity Ratio
		(Average/Minimum)
*Vital locations (entry/exit doors, service areas,	0.2 Min. to 1.25 Max.	4/1
ATMs, etc.)		
Sidewalks (outside of public or private street	0.2 Min. to .5 Max.	4/1
rights-of-way)		
Storage yards	0.2 Min. to 1.0 Max.	4/1
Loading/unloading docks and platforms	0.2 Min. to 3.75 Max.	4/1
Auto sales yard/enclosed outdoor display	0.2 Min. to 1.25 Max.	8/1
General recreational areas (fields, playgrounds,	0.2 Min. to 2.5 Max.	4/1
courts, Pools, greenways)		

<sup>\*</sup>Maintained foot-candles for vital locations shall be generally based on an area 10 feet by 10 feet or the limits of the specific area.

## Section 5. Design Requirements

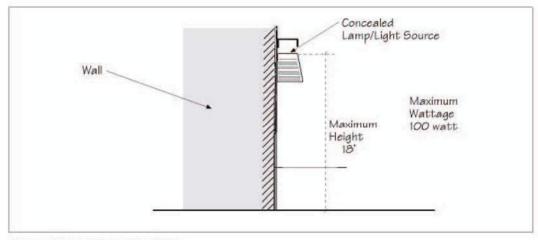
Exterior lighting, such as that used in and around buildings, recreation areas, parking lots, and signs, shall be designed to prevent the excessive spillover of light onto adjacent properties. It shall also be designed to protect against glare onto public and private streets and private driveways that would impair the vision of motorists and adversely impact adjoining properties. The impact of exterior lighting on adjacent properties shall be reduced by one or more of the following: existing vegetation, thick evergreen vegetated buffers, berms, walls, or fences, and/or the use of directional lighting, lighting shields, special fixtures, timing devices, appropriate light intensities, luminaries, and mountings at appropriate heights. External and/or internal shields are required on all lights in vehicular use areas and lights mounted to buildings where they are immediately adjacent to residential uses (such as along the edges of parking lots or mounted to the rear of buildings close to residential uses). All outdoor lighting shall conform to the following design standards:

#### A. Mounting Heights

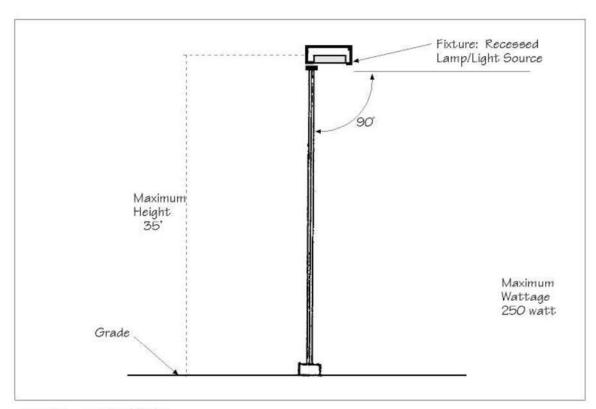
Outdoor lighting fixtures shall be designed, located and mounted at heights shown to be appropriate, but in no case shall be greater than:

- 1. 35 feet above grade for *cutoff* lights (see Sec. 4(D)(3)).
- 2. Mounting height is measured from the finished grade or surface and includes the total height of the fixture, pole, and any base or other supporting structure required to mount the light(s).

<sup>\*\*</sup> A vehicular use area, or "VUA", is an area, other than a public street, where motor vehicles are either parked, stored, or driven, including private driveways, private streets, parking lots, motor vehicle display lots, and motor vehicle rental depots, but not including alleyways, parking structures or buildings, underground areas, or areas which are used exclusively as loading areas or service areas.



WALL-PACK LIGHT FIXTURES

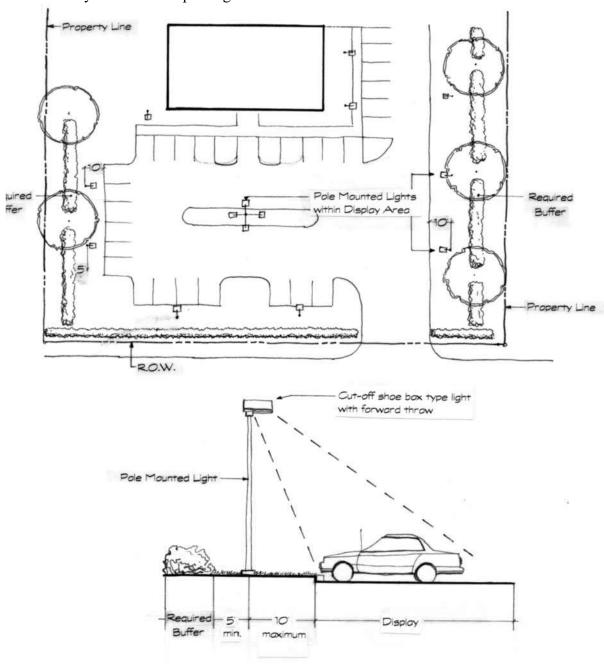


CUTOFF LIGHT FIXTURE

#### B. Location

1. All outdoor lighting fixtures shall be located a minimum of 5 feet from a property or street right-of-way line, and should be kept out of and at least 2 feet away from any required perimeter or streetscape buffer, and Tree Coverage Area (as defined in the Tree Protection Additional Element).

- 2. The layout of lighting shall be designed so that poles do not interfere with other elements of the approved site such as trees, landscaping, and parking. In general, poles should be kept at least 20 feet away from the trunk of any canopy tree and at least 10 feet away from the trunk of any understory tree.
- 3. Lighting for outdoor display areas, such as auto dealerships, must be located inside the illuminated area or no more than 10 feet away from the outside edge of the illuminated area so that the amount of direct glare and the visual field of view does not present a safety hazard to the passing motorist.



#### C. Architectural/Site Compatibility

Lighting fixtures shall be of a design and size compatible with the principal building of a development and adjacent areas, and shall be designed to be an integral part of the entire development site. Light fixtures and poles will be considered neutral elements of the site and must be finished in black, gray, dark brown, or architectural bronze. All light fixtures/poles on site including building mounted lighting shall be the same color throughout the development. White and other bright colors are prohibited.

## D. Spillover Light and Glare Control

- 1. All outdoor lighting shall be designed and located such that the maximum illumination at the time of installation measured in foot-candles at the property line shall not exceed 0.5 onto adjacent residential sites and 1.0 onto adjacent non-residential sites, public and private streets, and private driveways.
- 2. Cutoff lights shall be *full* cutoff with no sag-type lenses;
- 3. Cutoff lights used along the perimeter of non-residential sites where they are immediately adjacent to adjoining residential properties must be fitted with externally mounted shields placed on the residential side. The shields must be appropriately sized to sufficiently limit visible glare from the light onto the residential properties. Additional internal shields or other devices may be required to direct the light away from residential properties.

#### E. Wattage

Lamps for cut-off fixtures shall not exceed 250 watts.

#### F. Color Temperature

Cooler light sources (e.g. 5,000 - 6,000 Kelvin) will be prohibited and warmer light sources (e.g. 3,000 - 4,000 Kelvin) shall be utilized.

#### G. Building, Ground Mounted Fixtures and Accent Lighting

Lighting shall not be mounted to buildings or used to illuminate buildings or other site features unless approved by the Planning Director as integral elements on the applicable development plan. Lighting will not be approved unless the light fixtures are located, aimed, and shielded so that light is directed only onto limited parts of the building façade, landscape, and site features, and spillover light is minimized (see also Secs. 4(C) Architectural/Site Compatibility, 4(D) Spillover Light and Glare Control, and 4(E) Wattage). Building, ground mounted fixtures, and accent lighting must meet the following criteria:

- 1. Lights must not be used to illuminate entire portions of building(s), landscape, or site features.
- 2. Building mounted lights such as wall-pack and goose-neck type fixtures shall be fully shielded, true cutoff type fixtures (concealed lamp/light source). The lighting must be directed downward, and the wattage must not exceed 100 watts.

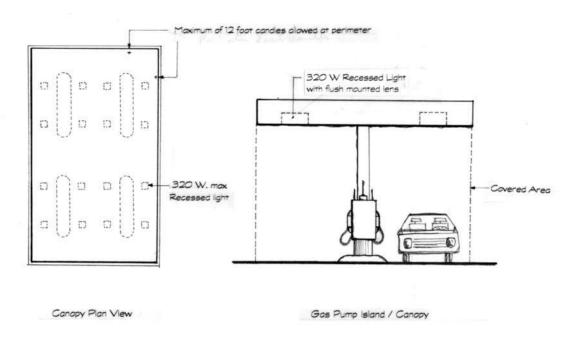
- 3. Accent lights must be low-wattage or low-voltage and the maximum illumination on any surface shall not exceed 5.0 average foot-candles at the time of installation.
- 4. Awnings and canopies used for building accents over doors, windows, and etc. shall not be internally lit (i.e., from underneath or behind). If lit from above, the lighting must be spaced sparingly so that only limited portions of awnings and canopies are accented.
- 5. Lights that flash, move, revolve, rotate, scintillate, blink, flicker, vary in intensity, or use intermittent electrical pulsation are prohibited.

## H. Floodlights

Floodlights or similar types of directional lighting attached to light poles or buildings to illuminate large portions of the site and/or building(s) are prohibited unless approved by the Planning Director. The use of floodlights or similar types of directional lighting will only be considered for special approval for industrial type uses or where it can be demonstrated that site or design constraints warrant their use.

#### I. Lighting for Gas Station/Convenience Store Canopies

Lighting for canopies for service stations and similar uses shall be restricted to no more than two 320 watt recessed lighting fixtures (including lenses) mounted flush with the bottom of the canopy on each side of a gasoline pump island, or any other design that meets the standards of this Element. Lighting for canopies for service stations and other similar uses including, but not limited to, bank and pharmacy drive through, and large covered main entrance canopies shall not exceed a maximum level of 12 foot-candles at the time of installation as measured at ground level at the inside of the outside edge of the canopy and an average level of 25 foot-candles under the canopy at the time of installation.



#### J. Lighting Control Requirements

Subject to necessary technology being reasonably and locally available, outdoor lighting in non-residential development will have photoelectric switches or other controls.

## K. Illuminated Tubing or Strings of Light

Illuminated tubing or strings of light on trees and landscaping or outlining property lines or open sales area allowed.

## Section 6. Special Purpose Lighting

Lighting not complying with the technical requirements of this Element, but consistent with its intent, may be installed for the following applications, if approved as an Administrative Alternative by the Planning Director:

- 1. Sports facilities\*, including but not limited to unconditioned rinks, open courts, fields, and stadiums.
- 2. Construction lighting.
- 3. Lighting for industrial sites having special requirements, such as petrochemical manufacturing or storage, shipping piers, etc.
- 4. Parking Structures.
- 5. Urban parks.
- 6. Ornamental and architectural lighting.
- 7. Theme and amusement parks.
- 8. Correctional facilities.
- 9. Other non-exempt lighting not specifically addressed in this Section.

#### \*Sports and Athletic Field Lighting

Lighting for ball fields may need to exceed illumination standards for general recreational needs in order to meet higher standards required for tournament play. The Planning Director must approve any variance from the illumination standards; however, before any variance will be considered the sports lighting must meet these minimum standards:

- 1. Fixtures must not exceed 80 feet in mounting height (this includes bases and/or other mounting structures).
- 2. Fixtures must be fitted with the manufacturer's glare control package. If the manufacturer does not have a glare control package, the fixture specification must be changed to a manufacturer that offers a glare control package. Fixtures must be designed and aimed so that their beams fall within the primary playing area and the immediate surroundings, so that direct illumination onto adjoining properties

- 3. Fixtures must be designed and aimed so that their beams fall within the primary playing area and the immediate surroundings, so that direct illumination onto adjoining properties, public and private streets, and private driveways is significantly restricted. Spillover levels at the property line must not exceed 0.5 foot-candles onto residential properties.
- 4. Lighting shall be extinguished no later than one hour after the event ends.

## Section 7. Exemptions

The standards of this Element shall not apply to:

- 1. Individual residential lot and dwelling lighting, but these standards are applicable to outdoor recreational use lighting in residential subdivisions.
- 2. Lighting with General Temporary Signs under the Master Signage Plan Additional Element.
- 3. Sign illumination regulated by the Master Signage Additional Element.
- 4. Public and private streets and private driveways.
- 5. Property owned or operated by the Town or other governmental entity.
- 6. Lighting used for emergency conditions and/or public safety.

## Section 8. Final Inspection

Before certificates of occupancy are issued, the parcel owner must supply the Town with a final letter of certification from (i) a licensed lighting professional holding the PE, LC or CLEP certification or similar certification that indicates proficiency in the design of outdoor lighting, (ii) a lighting manufacturer, or (iii) the local electric utility, verifying that all site lighting is installed according to the standards of this Element, the approved development plans, and any applicable conditions. The certification must include a report indicating that all site and exterior mounted building lighting was inspected and the light levels measured and recorded (including spillover lighting).

#### Section 9. Definitions

NOTE: The following definitions are applicable in this Lighting Element, whether or not the first letter in the word or words is capitalized.

**Ambient Lighting** – the light surrounding an environment or subject.

**Architectural Lighting** – Lighting designed to reveal architectural beauty, shape and/or form and for which lighting for any other purpose is incidental.

**BUG** – a light fixture classification system that classifies backlight (B), uplight (U), and glare (G).

Canopy – In the context of lighting (not trees), is a covered, unconditioned structure with at least one side open for pedestrian and/or vehicular access. An unconditioned structure is one that may be open to the elements and has no heat or air conditioning.

**Emergency Conditions** – Generally, lighting that is only energized during an emergency; lighting fed from a backup power source; or lighting for illuminating the path of egress solely during a fire or other emergency situation; or, lighting for security purposes used solely during an alarm.

**Foot-candle** – The unit of measure expressing the quantity of light received on a surface. One foot-candle is the illuminance produced by a candle on a surface one foot square from a distance of one foot.

**Glare** – Lighting entering the eye directly from a light source or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.

**IESNA or IES** – Illuminating Engineering Society of North America.

**Lamp** – A generic term for a source of optical radiation (i.e. "light"), often called a "bulb" or "tube". Examples include incandescent, fluorescent, high-intensity discharge (HID) lamps, and low pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.

**LED** – Light Emitting Diode.

**Light Pollution** – Any adverse effect of artificial light including, but not limited to, glare, light trespass, sky-glow, energy waste, compromised safety and security, and impacts on the nocturnal environment.

**Light Trespass** – Light that falls beyond the property it is intended to illuminate.

Lighting - "Electric" or "man-made" or "artificial" lighting. See "lighting equipment".

**Lighting Equipment** – Equipment specifically intended to provide gas or electric illumination, including but not limited to, lamp(s), ballast(s), poles, posts, lens(s), and related structures, electrical wiring, and other necessary or auxiliary components.

**Lighting Zone** – An overlay zoning system establishing legal limits for lighting for particular parcels, areas, or districts in a community.

**Object** – A permanent structure located on a site. Objects may include statues or artwork, garages or canopies, outbuildings, etc.

**Ornamental lighting** – Lighting that does not impact the function and safety of an area but is purely decorative, or used to illuminate architecture and/or landscaping, and installed for aesthetic effect. With respect to public and private streets and private driveways, ornamental lighting is lighting that serves a decorative function in addition to providing optics that effectively deliver street lighting, has a historical period appearance or decorative appearance, and has the following design characteristics:

- Designed to mount on a pole using an arm, pendant, or vertical tenon;
- Opaque or translucent top and/or sides;
- An optical aperture that is either open or enclosed with a flat, sag or drop lens;
- Mounted in a fixed position; and
- With its photometric output measured using Type C photometry per IESNA LM-75-01.

**Outdoor Lighting** – Lighting equipment installed within the property line and outside the building envelopes, whether attached to poles, building structures, the earth, or any other location; and any associated lighting control equipment.

**Photoelectric Switch** – A control device employing a photocell or photodiode to detect daylight and automatically switch lights off when sufficient daylight is available.

**Property Line** – The edges of the legally-defined extent of privately owned property.

**Sales area** – Uncovered area used for sales of retail goods and materials, including but not limited to automobiles, boats, tractors and other farm equipment, building supplies, and gardening and nursery products.

**Sky Glow** – The brightening of the nighttime sky that results from scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Sky glow is caused by light directed or reflected upwards or sideways and reduces one's ability to view the night sky.

**Translucent** – Allowing light to pass through, diffusing it so that objects beyond cannot be seen clearly (not transparent or clear).

# 9. Public Art Element

#### Introduction

Art has a positive effect both socially and economically on a community and reaches across age, race, language, and socio-economic differences to provide a powerful way for people to engage with one another. An art program for Chatham Park will help to establish its identity as a place and will provide an important contribution to the legacy of art not only locally, but also nationally and internationally. Art in spaces on publicly owned or controlled properties in Chatham Park is referred to in this Element as "public art". Examples of properties that are publicly controlled are street rights of way and utility easements dedicated to the Town of Pittsboro (the "Town"). All art in Chatham Park that is not included in the term public art is referred to herein as "other art".

## Section 1. Purpose

The primary purpose of this Master Public Art Plan Additional Element (also referred to herein as the "Element") is to establish a strong and enduring "Art Program" that will help shape the Chatham Park appearance and character through displays of public art and other art. This Element does not define or limit what constitutes art, but it establishes a framework for making art an important part of the landscape of Chatham Park.

# Section 2. Objectives

This Element is based on general objectives which also could apply to the Town's public art planning efforts as a whole and specific functional program areas in particular. These objectives therefore should be viewed as some key principles for consideration by the Town in establishing its own public art program which is responsive to community expectations and well-being.

## Objective 1:

Develop a Chatham Park Art Program that has a positive aesthetic and economic impact on the community through the provision, selection, funding, and maintenance of art.

- 1. Potential locations for public art installations may be provided in Small Area Plans or in development plans. As used in this Element, and notwithstanding any other approved definition of such term, the term "development plan" shall refer to a site plan or a residential subdivision plan.
- 2. Potential locations for public art include, but are not limited to:
  - a. Gateway locations.
  - b. Streetscapes.
  - c. Parks and greenways.
  - d. Infrastructure projects such as bridges, water tanks, etc.

e. Publicly owned performing arts venues.

## Objective 2:

Create a non-profit Chatham Park Arts Advisory Board ("CPAAB") that works with the Chatham Park Development Review Committee ("DRC") to establish policies for displays of other art on privately owned properties in Chatham Park and implements the action steps necessary to create the Chatham Park Art Program. Subject to their availability to serve, the CPAAB will include two (2) persons from the art community in Chatham County. The responsibilities of the CPAAB include the following:

- 1. Oversee the implementation of the Chatham Park Art Program
- 2. Develop and propose to the DRC policy concerning art and conduct periodic reviews of the Art Program with associated updates to the DRC.
- 3. Advocate for art throughout Chatham Park.
- 4. Develop and propose to the DRC plans for the inventory, maintenance, acquisition and disposition of art to be displayed in Chatham Park.
- 5. Identify public and private funding sources that can assist in the provision of new, permanent and temporary works of art.
- 6. As directed by the DRC, review proposals for art placement in Chatham Park and make recommendations to the DRC.
- 7. As directed by the DRC, oversee the creation and implementation of an annual temporary art exhibition in Chatham Park.
- 8. To encourage owners of properties to be developed in Chatham Park to utilize local artists. To further this objective, the DRC will make available literature on local artists produced by local art organizations to owners of non-residential properties in Chatham Park who desire to submit development plans to the Town.

#### Objective 3:

Encourage the inclusion of "architectural art" components for non-residential building and site design in Chatham Park.

- 1. The DRC will work with the CPAAB and future property owners to help establish architectural focal points for non-residential building and site design prior to submittal of applicable development plans to the Town.
- 2. As part of the DRC's development plan review process, each non-residential project in Chatham Park will be required to submit an "art statement" to the DRC describing the type of art that will be included on the improvements to be constructed and/or on the development site. The type of art approved by the DRC will be included in the development plan submittal to the Town for that non-residential project and will be required to be completed/installed before any certificate of occupancy is issued by the Town for that non-residential project.
- 3. When the DRC deems it appropriate, a visual artist will be included as a member of the architectural and landscape architectural design team to help establish the site/building

art treatment.

## Section 3. Types of Art

The following is a list (not intended to be exclusive) of various types of art that may be placed in Chatham Park. This list and examples given are illustrative only and not intended to be exclusive.

- 1. Functional: This type of art is functional or utilitarian, and serves a purpose in the public realm. Examples include benches, bicycle racks, bus shelters, fences, and gates.
- 2. Object (or sculpture): This is a freestanding work of, physically independent of other site elements, It may consist of a variety of materials, including metals, wood, concrete, fiberglass, landscape, glass, and lighting elements.
- 3. Integrated: This type of art work is fully incorporated into the design of a larger project. Examples include bridges, retaining walls, landscaping, walkways, and buildings.
- 4. Interpretive: This type of public art has the primary purpose of educating the public. It might be self-explanatory or require a supplemental panel of facts explaining the art.
- 5. Monument: This is the most traditional type of public art. Monuments are typically cast in or sculpted from granite, bronze, or marble. Examples are monuments historical events or military, civic, or charitable leaders.
- 6. Murals: Murals are painted or applied to walls. While some murals are painted directly on walls, others are prepared in studio and later applied to walls. Today's murals typically depict persons or events or have messages that are unique to the locale.
- 7. Sensory Art: This type of art project can appeal to the visual, auditory, or touch senses, or to a combination of these. The most common example is a water fountain, which has auditory and visual features that enliven a space. Lighting and sound also are types of sensory art that often are found in urban public spaces.
- 8. Digital: Digital public art is a technologically based public art form. The artist's tool is a computer, or computerized camera or video projector. Examples of digital art include videos projected on the exterior walls of buildings, and augmented reality that may be viewed from a smart phone.

- 9. Temporary: These are works of art that are displayed for a specified period of time and can be in virtually any form. Temporary can be used for experimentation without a long-term obligation, and for topics or forms that are contemporary and might not be relevant later. Temporary works of art may be moved from place to place for enjoyment by a large number of persons..
- 10. Serial art: Serial, or series, art projects are a collection of artworks that reflect meaning through their relationship to one other. Series art projects can be installed in succession, delineating paths and borders, or can be presented as an installation of multiple objects.
- 11. Mosaic art, is the decoration of a ground or wall surface with designs made up of closely set, usually variously colored, small pieces of material such as stone, mineral, glass, tile, or shell. Unlike inlay, in which the pieces to be applied are set into a surface that has been hollowed out to receive the design, mosaic pieces are applied onto a surface that has been prepared with an adhesive.
- 12. Garden, Arbor and Landscape design are compositions of shape, form, colors, scents, and textures that are in constant flux. When landscape design moves beyond being a decorative element surrounding buildings and is an intentional work in and of itself it is to be considered a type of art as defined by this Element.

## Section 4. Implementation

Art in Chatham Park will be implemented as follows:

- 1. Art on privately owned non-residential properties in Chatham Park will be subject to applicable restrictive covenants and policies and procedures adopted by the DRC. Art located inside of non-residential buildings in Chatham Park will be encouraged by the CPAAB. Art on privately owned residential properties in Chatham Park is not subject to this Element.
- 2. Public art in and on properties owned by the Town or other governmental entities will be controlled by the respective governing bodies of such governmental entities. The CPAAB and DRC will be available to consult with and provide recommendations to governmental entities as to public art to be displayed in Chatham Park.
- 3. If the Town Board appoints a committee or board to advise and/or give recommendations to the Town Board with respect to public art in Chatham Park, at least one (1) person on such committee or board shall be appointed from a list of two (2) or more persons provided by the DRC.

# 10. Affordable Housing Element

#### Introduction

This is the Chatham Park Planned Development District Affordable Housing Plan Additional Element (the "Element"), which addresses affordable housing and workforce housing, or optional land donation in lieu thereof, to be provided for Chatham Park as set out herein. Each Article of this Element is divided into Sections (designated by numbers) and subsections (designated by letters).

#### Article 1. Definitions

The following definitions apply to this Element:

- 1. Accessory Dwelling or ADU: A Dwelling Unit that is ancillary or secondary to a primary Single-Family Dwelling and that has a separate kitchen, bathroom, and sleeping area existing either within the same structure or on the same Lot as the primary Single-Family Dwelling. An Accessory Dwelling shall be excluded when calculating the number of Dwelling Units that have been platted or constructed in Chatham Park, proposed to be platted or constructed in Chatham Park, and the maximum number of Dwelling Units allowed by the Chatham Park Master Plan.
- 2. Affordable Housing Unit or AHU: A Dwelling Unit for which monthly rent or mortgage payment plus monthly cost of potable water, sanitary sewer, electricity, natural gas, and property owner association assessments does not exceed the following:
  - a. For an Affordable Housing Unit Type 1 or AHU1, thirty percent (30%) of sixty percent (60%) of annual MFI divided by 12; or
  - b. For an Affordable Housing Unit Type 2 or AHU2, thirty percent (30%) of eighty percent (80%) of annual MFI divided by 12.
- 3. Apartment Dwelling: A Dwelling Unit in a building that contains two or more Dwelling Units that are rented or proposed for rental.
- 4. Chatham Park, Chatham Park Planned Development District, or Chatham Park PDD: The real property included in the property zoned by the Town of Pittsboro, North Carolina as the Chatham Park Planned Development District.
- 5. Dwelling Unit or DU: A living space that provides complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation (i.e., bathroom). Each of the following constitutes a Dwelling Unit for this Element: Single-Family Detached Dwelling; Townhouse Dwelling; Apartment Dwelling; and Accessory Dwelling.
- 6. Employment Center: A locally recognized concentration of employment opportunities practically available to the residents of the proposed AHUs and/or WHUs. Examples of an

employment center are: a Village Center (as defined in the Definitions and General Provisions approved with the Chatham Park Additional Elements); hospital; an industrial park; a commercial district; and an office park.

- 7. Fair Market Rent: The HUD fair market rent for the applicable fiscal year for the zip code in which the Dwelling Unit is located, or if HUD data is not available for that zip code, then for Chatham County, North Carolina, or if HUD data is not available for Chatham County, North Carolina, for the Metropolitan Area that includes Pittsboro.
- 8. Lot: A tract of real property identified on a plat recorded in the office of the Register of Deeds for Chatham County, North Carolina as a separate tract and intended for development thereon of one or more Dwelling Units.
- 9. Master Plan: The Master Plan for Chatham Park PDD adopted as part of the zoning of Chatham Park PDD by the Pittsboro Board of Commissioners, including all subsequently adopted amendments and supplements thereto, and including all "Additional Elements" as defined in the Master Plan.
- 10. Median Family Income or MFI: Annual median family income for a household of four (4) persons in the Durham-Chapel Hill, NC HUD Metro FMR Area, as determined annually by the United States Department of Housing and Urban Development (HUD) in its calculations of Income Limits for Public Housing and Section 8 Programs.
- 11. Multi-Family Dwelling: An Apartment Dwelling or an Accessory Dwelling.
- 12. Single-Family Dwelling: A Single-Family Detached Dwelling or Townhouse Dwelling.
- 13. Single-Family Detached Dwelling: A single Dwelling Unit on a Lot that either is the only Dwelling Unit on the Lot or is the primary Dwelling Unit on the Lot if there also is an Accessory Dwelling on the Lot.
- 14. Town of Pittsboro or Town: A municipal corporation organized under the laws of the State of North Carolina for the better government of the people within its jurisdiction and having the powers, duties, privileges, and immunities conferred by law on cities, towns, and villages. Additionally, for the purposes of this element, the terms "Town of Pittsboro" or "Town" may also refer to and be interchangeable with the terms housing authority, housing trust, redevelopment commission or similar type entity charged with the administration of affordable housing in the Town of Pittsboro's municipal jurisdiction.
- 15. Townhouse Dwelling: A Dwelling Unit in a building that contains two (2) or more separate Dwelling Units that are attached horizontally through one or more common walls, with each Dwelling Unit occupying space from the ground to the roof of the building (as contrasted with one Dwelling Unit being above another Dwelling Unit), and with each Dwelling Unit in the building located or capable of being located on a separate Lot.

- 16. Workforce Housing Unit or WHU: A Dwelling Unit for which monthly rent or mortgage payment plus monthly costs of water, sanitary sewer, electricity, natural gas, and property owner association assessments does not exceed thirty percent (30%) of one hundred twenty percent (120%) of annual MFI divided by 12.
- 17. Examples of AHUs and WHUs.

Example of a calculation for an AHU1:

- Assume MFI is \$86,400.00
- $-\$86,400 \times 60\% = \$51,840.00$
- $-\$51,840 \times 30\% = \$15,552.00$
- $-\$15,552.00 \div 12 = \$1,296.00$

An AHU1 in the foregoing example is one for which the monthly rent or mortgage payment plus monthly water, sewer, electricity, natural gas, and property owner association assessments does not exceed \$1,296.00.

Example of a calculation for an AHU2:

- Assume MFI is \$86,400.00
- $-\$86,400 \times 80\% = \$69,120.00$
- $-\$69,120.00 \times 30\% = \$20,736.00$
- $-\$20,736.00 \div 12 = \$1,728.00$

An AHU2 in the foregoing example is one for which the monthly rent or mortgage payment plus monthly water, sewer, electricity, natural gas, and property owner association assessments does not exceed \$1,728.00.

Example of a calculation for a WHU:

- Assume MFI is \$86,400.00
- $-\$86,400 \times 120\% = \$103,680.00$
- $-\$103,680.00 \times 30\% = \$31,104.00$
- $-\$31,104.00 \div 12 = \$2,592.00$

A WHU in the foregoing example is one for which the monthly rent or mortgage payment plus monthly water, sewer, electricity, natural gas, and property owner association assessments does not exceed \$2,592.00.

#### Article 2. Affordable Housing Plan

AHUs and WHUs shall be provided for Chatham Park in accordance with this Element

1. The total number of AHUs and WHUs required for Chatham Park is equal to seven and one-half percent (7.5%) of the total number of Dwelling Units "platted" in Chatham Park, Additional Dwelling Units in Chatham Park resulting from density credits as provided herein shall not be counted in determining the total number of Dwelling Units platted in Chatham

Park. A Dwelling Unit in Chatham Park is deemed to be "platted" as follows:

- a. A Single-Family Dwelling is platted when a plat showing the Lot on which the Single-Family Dwelling is constructed or is to be constructed is recorded in the office of the Register of Deeds for Chatham County, North Carolina.
- b. An Apartment Dwelling is platted when a certificate of occupancy is issued for the Dwelling Unit that constitutes the Apartment Dwelling.
- 2. **Table 1** attached hereto and incorporated by reference shows the number of AHU1s, AHU2s, and WHUs required to be provided by this Element as various levels of total numbers of Dwelling Units in Chatham Park are platted. Not less than ten percent (10%) of such Dwelling Units shall be Single-Family Dwellings (**Table 1** shows 10% Single-Family Dwellings and 90% Multi-Family Dwellings).
- 3. Each level of total Dwelling Units in Chatham Park shall not be exceeded until the required number of AHUs/WHUs has been provided.
- 4. If more than the minimum required numbers of AHUs and WHUs are provided as the various total numbers of Dwelling Units in Chatham Park are platted, the excess may be applied against satisfaction of subsequent minimum requirements.
- 5. AHUs and WHUs that satisfy the requirements of this Element may be provided in any combination of for sale Dwelling Units, subsidized for sale Dwelling Units, rental Dwelling Units, or subsidized rental Dwelling Units.
- 6. Ninety percent (90%) of the total number of Dwelling Units provided to satisfy the requirements of this Element shall remain an AHU or WHU, as applicable, for 30 years, beginning with the year in which it first is occupied; provided, each AHU shall remain an AHU for 30 years, beginning with the year in which it first is occupied. With respect to each WHU that is subject to the 30 year requirement, for each month during the 30 years that the monthly Fair Market Rent for the WHU exceeds 120% of the applicable MFI divided by 12 (such amount being referred to as the "excess"), the Town will pay the excess for that month.
- 7. AHUs, WHUs, and land donated to satisfy the requirements of this Element may be provided on land within the boundaries of Chatham Park PDD, on land within one-half (1/2) mile of any boundary of Chatham Park PDD, or on other land approved by the Pittsboro Board of Commissioners. Unless otherwise approved by the Pittsboro Board of Commissioners, land donated in lieu of providing AHUs and WHUs shall be in the Town limits of Pittsboro or, contemporaneously with the land donation, an annexation petition shall be filed to annex such land into the Town limits of Pittsboro.
- 8. Land proposed for donation to the Town in lieu of providing AHUs and WHUs shall:
  - a. Not contain any wetlands or flood plain in the portion of the land on which Dwelling Units are to be constructed;
  - b. Have a boundary or portion of a boundary that adjoins a publicly dedicated street

right of way;

- c. Have potable water and sanitary sewer lines constructed to a boundary of the land or located in a publicly dedicated easement that adjoins a boundary of the land. Allocation of water and sanitary sewer capacity for to a Preliminary Plan approved pursuant to the following Section 9 of Article 2 of this Element shall be done in accordance with applicable Town ordinances and regulations; and
- 9. A proposal for land donation to the Town in lieu of provision of AHUs and WHUs shall include a Town approved subdivision plan or site plan (the "Preliminary Plan") showing the number and types of AHUs and/or WHUs, excluding Accessory Dwellings proposed for construction on the land. The number of AHUs and/or WHUs in the approved Preliminary Plan shall be provisionally credited against the number of AHUs and/or WHUs required by this Element and may be included in the annual report required by this Element. A Preliminary Plan shall remain valid for eight (8) years after the date it is approved. Prior to donating the land to the Town, until the earlier of commencement of development on the land proposed for donation or six (6) years after the date the Preliminary Plan is approved, Chatham Park Investors LLC shall make a good faith effort to obtain a commitment from a developer who agrees to develop the land and provide the number of AHUs and/or WHUs required by the Preliminary Plan. If development of the land proposed for donation has not commenced within six (6) years after the date of Preliminary Plan approval, Chatham Park Investors may then convey the land to the Town and the number of AHUs and/or WHUs proposed in the Preliminary Plan shall be finally credited against the number of AHUs and/or WHUs, as applicable, required by this Element. It is the responsibility of the Town to determine the length of time, not to exceed thirty (30) years, that AHUs and/or WHUs constructed on land donated to the Town remain AHUs and/or WHUs.
- 10. On or before July 1, 2024, the Affordable Housing Task Force previously appointed by the Town, with replacement of persons on the Task Force as necessary (e.g. unavailability) shall recommend to the Town how to administer, support, and incentivize the development of Affordable Dwelling Units and Workforce Dwelling Units in the Town of Pittsboro. If the Town has not established a method or entity to administer, support, and incentivize development of AHUs and WHUs by July 1, 2026, the requirement for provision of AHUs and WHUs shall be suspended until the method or entity is established. Provided, however, AHUs and WHUs for Chatham Park may continue to be provided during such time of suspension.
- 11. Commencing on July 1, 2022 and continuing through June 30, 2052, not less than two and one-half percent (2.5%) of the annual ad valorem taxes on real properties in Chatham Park PDD, but not on any other property in the Town of Pittsboro, collected by or paid to the Town of Pittsboro shall be allocated to be used solely for any one or more of the purposes described in the foregoing Section 10 of Article 2 of this Element in connection with AHUs and WHUs required by this Element. Prior to June 30, 2052, the Town will evaluate the need for extending this allocation of annual ad valorem taxes.
- 12. All land donated to the Town, or to a housing trust or other organization approved by the Town, in lieu of AHUs and/or WHUs required by this Element shall be used by the Town, or by a housing trust or other organization approved by the Town, for one or more of the following:

- a. construction of AHUs or WHUs thereon in satisfaction of the requirements of this Element;
- b. sale or donation of the land to a developer who will construct AHUs and/or WHUs in accordance with the approved Preliminary Plan; or
- c. sale of the land to raise proceeds to be used for construction of AHUs or WHUs in satisfaction of the requirements of this Element.
- 13. The value of all land donated in satisfaction of the requirements of this Element and the costs of donating such land shall be eligible for federal and state income tax deductions or credits. Provided, the Town shall have no liability if a tax deduction or credit is not allowed by the Internal Revenue Service or State of North Carolina.
- 14. All AHUs and WHUs provided to satisfy this element shall be subject to all applicable restrictive covenants, including payment of assessments as provided in the applicable restrictive covenant documents.
- 15. The Town of Pittsboro, if it has capacity, shall allocate water and sanitary sewer capacity for all AHUs and WHUs provided to satisfy the requirements of this Element. Provided, however, sanitary sewer capacity for all such AHUs and WHUs that is not available from the Town of Pittsboro and is provided by either the Chatham Park Water Recovery Center (located at the intersection of U.S. Highway 64 Business and Eubanks Road) or by other sewer capacity owned by or allocated to Chatham Park Investors LLC or its assignees or affiliates (e.g., sewer capacity to be provided by the City of Sanford), shall be provided at the same costs as it is provided for other residential properties in Chatham Park.
- 16. Each AHU and each WHU provided to satisfy the requirements of this Element shall be entitled to a rebate of all Town of Pittsboro fees related to construction of residential dwellings including, without limitation: water & sewer system development fees and permits; subdivision plan and site plan review application fees; plat review fees; engineering plan/construction drawing review fees; recreation and park fees; open space fees; and stormwater review fees, facility fees, and discharge permit fees. Also, to the extent such fees are payable to or controlled by the Town of Pittsboro, each AHU and WHU provided pursuant to this Element shall be entitled to a rebate of school impact fees, building permit and inspection fees, and sedimentation and erosion control permit and inspection fees. Rebate of any of the foregoing fees addressed by the Town's Unified Development Ordinance or other applicable ordinance shall be done in accordance with the applicable ordinance.
- 17. No dedication of park land required by the Chatham Park Master Public Facilities Plan Additional Element shall be required for any AHU or WHU provided to satisfy the requirements of this Element or for AHUs and/or WHUs in an approved Preliminary Plan for land donated to the Town.
- 18. For each AHU and each WHU provided pursuant to this Element, Chatham Park Investors LLC shall receive a density credit of eight (8) Dwelling Units for each AHU or WHU that is partially or wholly located within the applicable distances of at least three (3) of the following four (4) locations, or four (4) Dwelling Units for each AHU or WHU that is partially or wholly

located within the applicable distances of at least two (2) of the following four (4) locations, or two (2) Dwelling Units for each AHU or WHU that is partially or wholly located within the applicable distance of at least one (1) of the following four (4) locations, or one (1) Dwelling Unit for each AHU or WHU that is not located within the applicable distance of any of the following four (4) locations:

- a. within a one-half (1/2) mile radius of a boundary of a store at which fresh fruits and vegetables are sold and is in operation not later than six (6) months immediately following the date the applicable AHU or WHU first is occupied;
- b. within a one-half (1/2) mile radius of a boundary of a site on which a public school is located and is in operation not later than six (6) months immediately following the date the applicable AHU or WHU first is occupied;
- c. within a one-fourth (1/4) mile radius of a boundary of a site on which a transit stop is located and is in operation not later than six (6) months immediately following the date the applicable AHU or WHU first is occupied; and
- d. within a one (1) mile radius of a boundary of an Employment Center.

Each of the foregoing density credits must be used within a one-half (1/2) mile radius of a boundary of one (1) of the locations that is used to qualify for the density credit. Dwelling Units resulting from density credits for Affordable Units within Chatham Park PDD are in addition to the maximum number of Dwelling Units allowed by the Chatham Park PDD Master Plan. The foregoing density credits are in lieu of other density credits provided in Town of Pittsboro ordinances.

- 19. Chatham Park shall not be subject to any Town of Pittsboro ordinances or regulations, other than this Element, that require the provision of AHUs, WHUs, land dedication in lieu thereof, monetary payments in lieu thereof, any combination of one or more of the foregoing, or any other ordinance or regulation relating to the required provision of AHUs or WHUs. Provided, however, Chatham Park may participate in all Town of Pittsboro ordinances and regulations that provide incentives for the provision of AHUs and WHUs, except that where this Element and applicable Town of Pittsboro ordinances and regulations address the same type of incentive (e.g., density credits), this Element shall control, and Chatham Park shall be entitled only to the incentive specified in this Element.
- 20. The Town of Pittsboro shall work with Chatham County to identify incentives that may be used by Chatham Park and others for the provision of AHUs and WHUs (e.g., no school fees required for AHUs and WHUs; and percentage of annual ad valorem taxes paid to Chatham County to be allocated toward AHUs and WHUs in the same manner as described in this Element for allocation of ad valorem taxes collected by the Town of Pittsboro).
- 21. On or before each February 15, Chatham Park will submit a report to the Town confirming the number of AHUs and WHUs during the immediately preceding calendar year provided for Chatham Park that have been sold or rented, and the number of AHUs and/or WHUs in Preliminary Plans for proposed land donations to the Town, and including the cumulative total of the foregoing through the end of the immediately preceding calendar year.

					TABLE 1	1				
	)	Chatham	ר Pa	rk - Af	fordable	& Workf	Park - Affordable & Workforce Housing	sing		
		Overall Percent	ent	7.5%			Under 60%	15.0%		
		Single Family	۱۸	10.0%		MFI Category	61 - 80%	25.0%		
		Multi-Family	<u>^</u>	90.0%			81 - 120%	%0:09		
Prior to DU's platted in Chatham Park	Under 60%	Under 60% MFI (AHU1)		61 - 80% MFI (AHU2)	ты (АНО2)	81 - 120% MFI (WFU)	MFI (WFU)		Total	
	Single-Family	Multi-Family	S	Single-Family	Multi-Family	Single-Family	Multi-Family	Single-Family	Multi-Family	Grand Total
2000	9	51		6	84	23	203	38	338	376
7500	3	25		2	42	11	101	19	168	187
10000	3	25		5	42	11	101	19	168	187
12500	3	25		5	42	11	101	19	168	187
15000	3	25		5	42	11	101	19	168	187
17500	3	25		5	42	11	101	19	168	187
20000	3	25		5	42	11	101	19	168	187
22000	2	20		4	34	6	83	15	137	152
Total	26	221	j	43	370	86	892	167	1483	
Grand Total	2,	247		413	.3	066	06		1650	

# 11. Transit Element

### Introduction

This is the Master Transit Plan Additional Element for Chatham Park PDD (the "Transit Element"). The Master Plan provides the framework for a Multi-Modal Transportation Plan (MMTP), which will integrate all potential transportation modes for the overall development of Chatham Park. The multi-modal elements of the Master Plan were developed in consideration of various existing plans, including the following:

- 1. Pittsboro Pedestrian Transportation Plan (2009)
- 2. Pittsboro Comprehensive Transportation Plan (2011)
- 3. Chatham Transit Network Community Transportation Service Plan (2011)
- 4. Pittsboro Land Use Plan (2012)
- 5. NCDOT Complete Streets Planning and Design Guidelines (2012)

# Section 1. Streets and Roadways

The N. C. Department of Transportation (NCDOT) adopted a "Complete Streets" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. The benefits of this approach include:

- 1. Making it easier for travelers to get where they need to go;
- 2. Encouraging the use of alternative forms of transportation;
- 3. Building more sustainable communities;
- 4. Increasing connectivity between neighborhoods, streets, and transit systems;
- 5. Improving safety for pedestrians, cyclists, and motorists.

Specifically, the NCDOT *Complete Streets Planning and Design Guidelines* (July 2012) recommends that designers balance the interest of each mode of travel when designing street projects. This approach recognizes that complete street designs are not "one size fits all," and that designers should consider "functional and context-based criteria to help select the appropriate cross-section" for each street in a network.

Typical street sections, right of way widths, and street sections to be constructed initially, will be established in Small Area Plans, and may vary from Town requirements that otherwise would apply for the street type. Final street section design and right of way dedication will be determined at the time of development plan<sup>1</sup> approvals. Roadways shown in the Master Plan or in Small Area Plans that are to have four (4) or more vehicular travel lanes are depicted at full build- out, which is expected to occur as Chatham Park develops. These roadways initially

<sup>&</sup>lt;sup>1</sup> As used in this Element, and notwithstanding any other approved definition of such term, the term "development plan" shall refer to a site plan or a residential subdivision plan.

will be constructed with two (2) vehicular travel lanes, and additional vehicular travel lanes and other improvements will be constructed in accordance with the recommendations of applicable TIAs.

A MMTP that delineates major multi-modal facilities and services planned for Chatham Park was approved as part of the *Chatham Park PDD Master Plan*. Further details on the planning and design for various modes of transportation are provided below.

While the typical roadway in Chatham Park will follow the NCDOT Complete Street Guidelines, alternate street designs will be used in situations not covered by the guidelines or where the Town approves a different design. Situations in which different design could be appropriate include, among others, alternate roadway sections, traffic calming measures, one way circulation, roadway terminations, and alleyways.

# Section 2. Transportation Impact Analysis

The Master Plan provides that a "Transportation Impact Analysis" ("TIA" and also referred to herein as a "Traffic Impact Analysis") is required for development in Chatham Park that will generate 100 new peak hour trips or 1000 new daily trips based on the most recent edition of the ITE Trip Generation Manual. TIAs in Chatham Park will be conducted by Kimley-Horn and Associates, Inc., or other North Carolina licensed engineers qualified to conduct TIAs (the "traffic consultant") recommended by the Development Review Committee and approved by the Planning Director. The "study area" of each TIA will include the driveways for the proposed development, all signalized street intersections within ¼ mile of the proposed development, and other street intersections within ¼ mile of the proposed development that the traffic consultant determines should be included in the TIA, and a scoping meeting will be held with the Town Engineering staff to determine any additional study area that is needed. Each TIA will be based on existing traffic counts and traffic expected to be generated by the proposed development. Each TIA will include a recommendation for construction or installation of any public infrastructure improvements deemed appropriate by the traffic consultant to address the traffic impact of the proposed development. For purposes of development plan approval, construction or installation of the public infrastructure improvements recommended in the TIA and approved by the Town and/or NCDOT will be deemed to adequately address the traffic impact of the proposed development.

# Section 3. Bicycle Accommodations

On-street bicycle facilities will be provided for all roadways except low-volume, low-speed 2-lane streets where cyclists would be expected to comfortably travel in general purpose lanes. The types and locations of on-street bicycle facilities will be determined in development plan approvals. Where appropriate, on-street bicycle facilities will be provided as either 5-foot bike lanes in each direction or as 10-foot multi-use paths parallel to the street for connection to a greenway. Appropriate pavement markings and signs, in accordance with current design standards, also will be provided to clearly delineate bicycle facilities for both cyclists and motorists.

The Master Plan also calls for greenway/multi-use path facilities to be constructed to supplement on-road bicycle and pedestrian facilities and to connect to natural areas and amenities within and in close proximity to the development. These facilities will be constructed at a minimum of 10 feet wide and would typically accommodate recreation cyclists. Conceptual locations of greenways in Chatham Park will be shown in Small Area Plans and specific locations of greenways will be detailed in development plans.

### Section 4. Pedestrian Accommodations

Sidewalks or a combination of sidewalks and multi-use paths will be provided on both sides of the streets in Chatham Park, with consideration being given to connectivity and encouragement of pedestrian use. Sidewalk widths will vary from 5 feet (typical) up to 20 feet in certain areas of predominantly urban context with high pedestrian volumes. Typical locations and widths of sidewalks will be provided as part of the roadway cross sections included in Small Area Plans, with final details to be determined at the time of development plan approvals. All sidewalks in Chatham Park will be constructed with appropriate curb ramps and marked crosswalks.

Greenway locations will be established in Small Area Plans, subject to adjustment in accordance with development plan approvals. Greenways will be constructed with asphalt, but may utilize alternative materials based on site-specific conditions. Where multi-use paths parallel and are proximate to a specific roadway, they will replace the 5 foot sidewalk on that side of the roadway.

When greenways and trails intersect roadways or railroads within Chatham Park, grade separated crossings and crossings at intersections will be encouraged and used where practicable. At grade, greenway and trail crossings of roadways in locations other than roadway intersections will be discouraged and typically not used.

### Section 5. Transit Accommodations

The Master Plan calls for Chatham Park to promote a transit system that would develop over time and be coordinated with local/County services as part of a comprehensive approach to transit. Existing transit services in Chatham County are provided by the Chatham Transit Network (CTN), and include the following:

- 1. Fixed route transit service between Pittsboro and Chapel Hill (PX Route);
- 2. Fixed route transit service between Pittsboro and Siler City (64 Route);
- 3. Health Rides service for residents 60 and older and other adults with driving impairment;
- 4. In-county on demand service; and
- 5. Subscription-based services for Central Carolina Community College and various human service agencies.

In addition, while the CTN Community Transportation Service Plan (CTSP) is not expected to

be updated until 2017, that agency is in the process of adding vehicles and considering feeder service to provide transportation for residents within a certain distance (likely 5 miles) of existing fixed transit routes. This will enhance mobility for County residents, and specifically could provide more convenient transit service for residents and workers in Chatham Park as it develops.

The Master Plan incorporates development patterns intended to support transit ridership as the County develops and transit services are enhanced over time. Each Small Area Plan will show proposed transit stops based on the land uses included in that Small Area Plan Upon implementation of transit services in Chatham Park, appropriate transit stops in Chatham Park will be determined with subsequently submitted development plans.

Chatham Park's significant bicycle and pedestrian facilities, as detailed above, will provide connectivity to transit stops. In addition, detailed design information for curb extensions, bus stops, and other transit amenities will be determined with development plans where appropriate to support and promote transit ridership. When a development plan is submitted prior to bus routes being determined for the Small Area in which the property subject to the development plan is located, the applicant will work with Town planning and engineering staff to identify possible transit stops and easements adjacent to street rights of way that may be needed for future transit amenities.

The Master Plan also calls for support for a local fixed-route circulator identified as the Primary Bus/Trolley Loop on the MMTP. This service, likely provided by a small bus or rubber-tire trolley vehicle, would circulate between downtown Pittsboro and the major commercial areas in the North Village. This loop would also provide service to the existing park and ride facility at Lowe's Home Improvement, allowing riders to connect to the express routes to Chapel Hill and Siler City. As future transit services are planned, Chatham Park will continue to work with local and regional agencies to coordinate park and ride facilities and connections to these services as they are provided.

### Section 5. Reimbursement

Reimbursement for funds expended for public street improvements within and outside of Chatham Park will be in accordance with the "Development Agreement" (required by the Master Plan) or other agreements between the Town and Chatham Park. Reimbursement may be in the form of development fee credits or other type of reimbursement specified in the Development Agreement or other agreements.

# 12. Public Facilities Element

### Introduction

Public facilities are those facilities required to support the services and functions provided in Chatham Park by the Town government or public utility companies. Such facilities are essential to support the community and its development and to enhance the overall quality of life in Chatham Park. Public services addressed in this Element include Town administration, police, fire, schools, parks and recreation, water supply and distribution, and sewer collection and treatment.

Much of the anticipated growth of the Town of Pittsboro for the next twenty to thirty years is expected to occur in Chatham Park. The Town's present system of public facilities demonstrates a commitment to service provision and the community's expectations. However, as existing infrastructure in the Town ages, there will be increased competition between newer and older areas for facility dollars. Therefore, it will become increasingly important that future development occur in concert with the provision of adequate public facilities at a level of service that is maintained in a fiscally sound manner.

This Element recognizes that the level of public services enjoyed by area residents is a significant local attribute and its continuation requires sound and supportable planning guidelines. Such guidelines should provide for a balance between future land use intensity and facility quantity and address the location of new facilities to maximize accessibility while minimizing neighborhood impact. Therefore, it is the purpose of this Element to provide guidance on both the quality and location of Town public facilities and services based on impacts from development of Chatham Park.

As used in this Element, the term "Chatham Park" refers to the land that has been zoned by the Town as a Planned Development District known as Chatham Park, "CPI" refers to Chatham Park Investors LLC or other applicable owner or developer, "North Village" refers to the portion of Chatham Park north of US Highway 64 Business, and "South Village" refers to the portion of Chatham Park south of US Highway 64 Business.

# **General Objectives**

This Master Public Facilities Plan Additional Element ("Public Facilities Element" or "Element") is based on general objectives which apply to the Town's public facility planning effort as a whole and specific functional program areas in particular. These objectives therefore should be viewed as the key principles for establishing a facility network which is responsive to community expectations, the public health, safety, and general welfare, and development impacts.

### Objective 1:

Locate new facilities to provide convenient services to the greatest number of people or service consumers and users.

- a. Site facilities appropriately to the area they are intended to serve.
- b. Reduce service area overlap between like facilities, unless overlap is necessary to correct service deficiencies.
- c. Locate facilities in order to maintain acceptable levels of service while reducing duplication or underutilization.
- d. In consideration of service area, site conditions, and other matters, new facilities may be located within or outside of Chatham Park.

### Objective 2:

Construct and maintain facilities in accord with expected levels of service objectives and fiscal limitations.

- a. Working in concert with the Town, program the establishment of facilities. Projects programmed for construction should be (1) demonstrated as required to meet public health or safety needs or appropriate service levels or (2) supported by a need analysis produced by the Town.
- b. Follow Town adopted public facility standards that identify facility requirements associated with level of need, appropriate quality and size, and relationship to population.
- c. Provide for adequate maintenance of existing facilities.

# Objective 3:

Balance the provision of public facilities with growth and development.

- a. Determine new facilities in size and quantity which are consistent with projected Chatham Park impacts.
- b. Plan for availability of adequate facility space and services as development occurs, either as planned in the Town's capital improvement plan or as provided with new development.
- c. Designate and reserve future public facility sites that will be required by anticipated future growth and development.
- d. Anticipate alternate uses for public facilities when existing public facility sites are no longer needed for their original use.
- e. Determine sites for public facilities in advance of demand either through purchase or dedication.

### Objective 4:

Mitigate the impact of public facilities on adjacent planned and existing land uses.

a. Locate public facilities in areas of compatible land use if service efficiency and cost effectiveness can be achieved. Siting facilities in areas of different land uses is acceptable and at times required, to provide centrally located public facilities which are critical to the public interest, as long as the integrity of the Master Plan is not impaired.

- b. Jointly locate public facilities whenever appropriate to achieve convenience and economies of scale, as long as the integrity of the Master Plan is not impaired.
- c. Design facilities to promote and enhance the community character.
- d. Provide for proper screening and buffering in order to mitigate visual impact on adjacent existing or anticipated future development of a different use or nature.
- e. Require site size and development to conform to all applicable standards to achieve maximum compatibility with surrounding land uses.

### Objective 5:

Site determination should be appropriate for the facility's specific purpose.

- a. Consider accessibility in siting facilities. In general, public facilities should have access to primary roadways. Exceptions may include facilities with a community pedestrian orientation, such as a neighborhood park or an elementary school.
- b. Locate facilities on sites which have adequate acreage for short-term needs, but can also accommodate anticipated expansion.
- c. Evaluate engineering considerations, such as slopes, soils, and other factors pertinent to knowing the extent of the site's development cost.
- d. Locate, as possible, facilities on sites with public water and sewer.

## Objective 6:

Financing Expansion of Public Facilities.

- a. When possible, public facilities and infrastructure will be expanded to serve Chatham Park in coordination with the growth of the Town's tax base that is attributable to Chatham Park.
- b. Consideration will be given by the Town to earmarking development fees paid with regard to development in Chatham Park for the expansion of public infrastructure serving Chatham Park.
- c. The Town will investigate and utilize, as appropriate, both traditional and innovative public financing techniques to fund the expansion of public facilities and infrastructure to serve Chatham Park.

### Objective 7:

Easements for Public Facilities.

As public utilities are expanded to serve Chatham Park, the Town and the developer will work together to obtain the necessary public easements and rights of way, and the Town may exercise the power of eminent domain when the negotiated acquisition of those interests is not reasonably possible. Public easements and rights of way within Chatham Park will be dedicated by the owner of the applicable property.

### Section 1. Master Public Facilities Plan

This Master Public Facilities Plan Element is presented in the following seven (7) sections: Police, Fire, Schools, Water Supply, Sanity Sewer, Parks and Recreation, and Town Administration.

For each of these sections, objectives are discussed and/or planning guidelines are presented and/or actions to be taken by Chatham Park are described. With respect to some matters, more particular information will be presented in the applicable Small Area Plan. In most cases these objectives and planning guidelines provide policies and/or standards and/or actions for one or more of the following factors:

<u>Location</u> – where facilities should be located in order to provide accessibility, support planned land uses, and adequately serve their function.

<u>Size and Design</u> – the appropriate facility size which should be constructed in relation to the population and design requirements to achieve neighborhood compatibility.

Other – factors which must be addressed to provide an acceptable level of service or community benefit.

# Section 2. Public Safety

The provision of public safety services is basic to an orderly society and the protection of the health and safety of Pittsboro residents. Primarily, this Element will consider the Police Department and Fire Department, while acknowledging there are other public safety services that are important to the health and safety of Pittsboro residents.

### **Objective:**

Enhance the services provided by public safety officials through the provision of appropriate facilities.

- a. Provide and locate the major facilities and appurtenances in a manner that enables optimum public safety telecommunications and the rapid dispatch of police, fire, and rescue services to the scene of citizen or other agency requests for assistance.
- b. Effectively locate telecommunications facilities and equipment associated with public safety agencies.
- c. Select new public safety facilities sites that have adequate space for future expansions and that provide opportunities for shared utilization to the extent possible.

### Police

Due to the nature of police work, which involves mobile patrol operations, the greatest need for facility space has been and primarily will be for administrative, operational support, and training functions. There are no nationally accepted standards for the provision of such facilities.

Similarly, there are no nationally accepted standards for the size of police patrol areas. Due to the flexibility and decentralized nature of police work, the day to day demands on police personnel change and local deficiencies can readily be alleviated through reassignment of officers and vehicles between station and patrol areas.

#### Location

### **Objective 1:**

As part of the Chatham Park Small Area Plan process, locate police stations and related facilities so as to provide the most efficient and expeditious law enforcement/protective service to the Town as a whole and within individual police districts.

a. Locate new police stations and substations: (i) near the geographical center of the service area; (ii) in or adjacent to commercial areas or as part of shared space with other public facilities where practicable; (iii) in a manner and location that is compatible with adjoining areas; (iv) on major streets with good access to all parts of the service area; and (v) with adequate parking for officers, employees, and visitors.

#### Character and Extent

# **Objective 2:**

Maintain or establish facilities that allow Police Department personnel to operate at maximum effectiveness.

- a. Size stations and substations to meet the expected level of police service required to protect people and property located or to be located in the service area.
- b. Locate new police stations on sites that will provide the necessary station square footage for officers, civilian personnel, persons in police custody, visitors, equipment, and vehicle parking.
- c. When locating new police stations with another public facility such as fire and rescue, provide for adequate acreage to accommodate both uses.
- d. When police substations are appropriate instead of police stations, establish locations adjacent to or in an existing or proposed commercial area.

### **Objective 3:**

Maintain an appropriate number of Police Department personnel to operate at maximum effectiveness in protecting public safety.

- a. Each Small Area Plan submitted for Chatham Park will provide an estimated number of additional Police Department personnel the Town will need based on population projections for that Small Area at full build out.
- b. Each Small Area Plan submitted for Chatham Park will include development phasing information to help the Town estimate the number of additional Police Department personnel and equipment that should be added on an annual basis until projected full development has occurred.

### Fire

Historically, fire stations have been located to provide an appropriate level of service based on acceptable response time, adequate fire flow, sufficient personnel and equipment and risk analysis. This Element assumes that an acceptable fire response time should be seven minutes 20 seconds after an emergency call is dispatched, which consists of 80 seconds turnout time, four minutes for travel and two minutes for preparation upon arrival at the location of the emergency. This Element also assumes that fire protection and first responder services should be provided as nearly as practicable in accordance with the Standards set forth in the National Fire Protection Association "NFPA 1710" document. This response time goal is critical to providing effective fire suppression as well as emergency medical services as defined in NFPA 1710. Traffic calming devices will affect response times. An acceptable Emergency Medical Services ("EMS") response time would allow 60 seconds turnout time, with four minutes for travel time. There are physical and economic restraints that may adversely impact the ability to achieve the desired response times. Increased service requests and significant traffic volume are other factors that may impede attainment of this goal. This Element also assumes that fire protection and first responder services should be provided as nearly as practicable in accordance with standards set forth by the North Carolina Department of Insurance, Fire and Rescue Service Division, the N.C. Association of Rescue and Emergency Medical Services, and the Insurance Service Office for all persons and property located within the Town so as to maintain an ISO insurance rating goal of 4/5.

The fundamental component for facility planning is determining future demand for emergency services. While providing new facilities to meet increasing demand is expected to be a primary focus for the Town and its fire protection service provider (collectively, the "Fire Department"), it is also true that existing facilities may require additions and rehabilitation to accommodate necessary emergency response equipment. Continued analysis of resource availability and utilization by the Fire Department may result in redeployment of equipment to heavier demand areas. Fire protection resources need to be distributed in the community based on risks, hazards, and values; and furthermore, they should be able to respond in a timely fashion to prevent a small fire from becoming a larger one. This involves the ability to concentrate resources, especially staffing, to be able to perform the job in a safe and effective manner on significant events.

#### Location

As part of the approval process for Chatham Park Small Area Plans, in conjunction with the Fire Department, a sufficient number of locations that maintain the acceptable response time coverage for fire and rescue emergencies within the applicable service area shall be identified based upon the following principles:

a) Identify locations for new fire stations as deemed necessary by the Fire Department for an appropriate level of service based on new development and information provided by Chatham Park.

- b) Identify the location for each new fire station at the most strategic point in a proposed service area to achieve the acceptable response time coverage to all points of the area served by that fire station and/or provide the most optimum service to that area based upon the following factors:
- i) Identify locations close to intersections where there is optimal access to public roads;
- ii) Avoid hillside locations or locations at the bottom of hills when a significant part of the service area is located upgrade;
- iii) Avoid locating stations directly on heavily traveled major thoroughfares; rather, locate on a parallel or cross street that includes a traffic signal with pre-emption capability at a nearby intersection for efficient egress/ingress;
- iv) Identify locations with relatively flat topography that provide the opportunity to buffer stations from adjoining properties;
- v) Where there is either a man-made or natural obstacle such as a railroad or river, locate stations on the side where the greatest hazard or higher incident activity exists; and
- vi) Locate stations to minimize service area overlap within five miles of an existing fire station and provide coverage to areas not already within five miles of an existing station.
- vii) When a new station is required to fill an existing service void and there is unavoidable overlap with another existing service area, the new station should be located so that any service overlap benefits the high risk/high density areas and alleviates the response requirements of other high activity areas. Chatham Park will identify anticipated high-risk areas/high density areas based on criteria provided by the Fire Department.
  - viii) Identify locations to maximize utilization of existing fire-flow availability.
- ix) Identify locations to achieve the response time goals for fire and emergency services equivalent from the station closest to the incident, assuming a driving distance of two miles and a driving speed of 30 mph.

### Character and Extent

### **Objective 2:**

Maintain or establish new facilities that allow the Fire Department to operate at maximum effectiveness.

- a) New fire stations should be constructed on sites that will accommodate Fire Department operational criteria.
- b) Fire station buildings and other improvements on fire station sites should be designed to be compatible with the architectural character of the surrounding area. Chatham Park design guidelines applicable to the fire station shall not unreasonably increase the cost of construction, operation and maintenance of the facility.

## **Objective 3:**

Maintain an appropriate number of fire personnel and associated equipment to operate at maximum effectiveness in protecting public health and safety.

- a) Each Small Area Plan submitted for Chatham Park will provide the following: estimates of full build-out residential population and density for that Small Area; estimates of full build-out non-residential square footage for that Small Area; and estimates of future growth and population density for surrounding areas in Chatham Park.
- b) Each Small Area Plan submitted for Chatham Park will include development phasing information in order for the Fire Department to analyze the need for additional Fire Department personnel and equipment on an annual basis until projected full build-out of that Small Area has occurred.
- c) As part of Small Area Plan submittals for Chatham Park, development standards, included projected maximum building heights, will be provided in order for the Fire Department to analyze equipment needs and vehicular upgrades necessary to operate at maximum effectiveness.

#### Fire Station Sites

### **Objective 4:**

Determine suitable sites for fire Stations in Chatham Park.

Chatham Park will cooperate with the Fire Department to determine the number, size, and location of fire station sites in Chatham Park in accordance with the Objectives set forth above. Proposed locations for such facilities in Chatham Park will be shown on Small Area Plans with sufficient data to justify acceptance by the Fire Department. In order to satisfy the above Objectives, the Fire Department's fire protection goals, and to maintain an acceptable level of fire protection service, Chatham Park agreed in the Master Plan for Chatham Park to provide the reasonably anticipated public facility needs generated by development of Chatham Park. As part of that commitment Chatham Park will donate up to four (4) fire station sites, at least 2.5 acres but not more than 3.0 acres in area, to the Town or, at its option, to its fire protection service provider, for no monetary consideration and by special warranty deed, subject to the Chatham Park Master Plan, Chatham Park Additional Elements, applicable Chatham Park Small Area Plan, Chatham Park Development Agreement (as defined in the Master Plan), applicable restrictive covenants of record, applicable

utility easements of record, and all other title exceptions acceptable to the Town at the time of conveyance. Conveyance of the site shall occur as soon as reasonably practicable following site plan approval by the Town for the fire station building on the site and Chatham Park Development Review Committee approval of the plans for the fire station building and other initial improvements on the site. The conveyancing deed may contain provisions restricting use of the site to fire station or other public facilities purposes, and for such other uses approved by the Chatham Park Development Review Committee.

### Section 3. Schools

Chatham County Schools ("CCS") will be the major provider of education for Chatham Park, but private schools and charter schools also will be used in order to provide a variety of school options and meet a wider variety of public interests. CCS has a wide range of educational facilities that accommodate instructional programs for Chatham County students from pre-kindergarten through grade 12 (referred to herein as "school age children"). In addition to accommodating educational programs, school facilities are used to meet a variety of recreational and cultural needs of the county through special programming. Generally, separate facilities are provided to serve three levels of education - Elementary, Middle School, and High School.

The fundamental component in capital facility planning for schools is determining future enrollments, a complex procedure established by Chatham County which continues to be refined. Chatham Park has worked with CCS staff and consultants using their adopted methodology for determining the projected school population expected to be generated by development of Chatham Park. These models are only effective with current data. Therefore, thorough knowledge of anticipated housing starts and use of appropriate dwelling-unit multipliers are essential, and Chatham Park will continue to work with CCS staff in regularly providing updated data.

Student enrollment forecasts, coupled with capacity estimates and facility standards, provide framework for capital facility planning. Locational criteria assist in site planning, identification, and selection.

The following Table 1 projects the anticipated number of schools needed to serve the school age children based on the maximum residential build out of Chatham Park (22,000 residential units). Chatham Park will consult with CCS staff on a quarterly or more frequent basis as necessary to determine school age children projections, and the numbers in Table 1 will be modified as development occurs in Chatham Park to determine more accurately the number of school age children resulting from development of Chatham Park and the number of schools that are needed to serve those students.

TABLE 1

Residential Category	Number of Dwelling Units	Number of School Age Children Per Dwelling Unit	Total Number of School Age Children per Unit Type
Single Family			
Age Targeted	6,000	0	0
≤3 Bedroom	7,350	0.45	3308
> 3 Bedroom	3,150	0.5	1575
Multi Family			
1 Bedroom	1,925	0.05	96
2 & 3 Bedroom	3,575	0.3	1073
TOTAL	22,000		6051

**Conclusion:** 22,000 dwelling units will generate 6,051 students

School Type	Percent of School Age Children	Number of Students	Standard School Capacity
Elementary	60%	3631	650
Middle	20%	1210	850
High	20%	1210	1200

Chatham Park will reserve a sufficient number of school sites to serve the school age children living in Chatham Park. School sites proposed for future use as Chatham County public schools and/or public charter schools and/or private schools will be identified in Small Area Plans as they are submitted to the Town for review and approval. Not less than one-half (1/2) of the reserved school sites will be designated as reserved for CCS, and Chatham Park will consult with CCS to determine a sufficient number and type of school sites (i.e., elementary, middle school, and/or high school) to be reserved for CCS.

Chatham Park will notify CCS when all of the following are available to a school site reserved for CCS ("Infrastructure Availability"): (a) public water service is available on the reserved school site or in a road right of way or easement adjacent to a boundary of the school site; (b) sanitary sewer service is available on the reserved school site or in a road right of way or easement adjacent to a boundary of the school site; and (c) a road dedicated to public has been constructed and adjoins part or all of a boundary of the reserved school site. The date of delivery of such notice to CCS is the "Notice Date".

On or before the date that is six (6) months immediately following the Notice Date (such date being referred to herein as the "Confirmation Date"), CCS shall notify Chatham Park either that CCS confirms reservation or does not confirm reservation of the applicable school site. If, on or before the Confirmation Date, CCS notifies Chatham Park that it does not confirm reservation of that school site, or if CCS fails to notify Chatham Park of its decision with respect to that school site, then the reservation of that school site for CCS shall terminate as of the Confirmation Date.

If CCS notifies Chatham Park prior to the end of the Confirmation Date that it confirms reservation of the applicable school site, then CCS shall have a period of four and one-half (4.5) years immediately following the Confirmation Date (the "Commitment Period") within which to make a "commitment" to that school site by delivering to Chatham Park a proposed development plan for that school site and a proposed date for commencement of construction of one or more schools on that school site. The development plan shall consist of a site sketch showing the proposed location of a school, parking, and recreation fields on the applicable school site. If CCS does not commit to that school site prior to the end of the Commitment Period, then the reservation of that school site for CCS shall terminate as of the end of the Commitment Period.

If CCS commits to the applicable school site prior to the end of the Commitment Period, then CCS shall have until the date that is five (5) years immediately following the last day of the Commitment Period within which to commence construction of one or more schools on that school site (the "Construction Commencement Date"). For the purposes of this Section, the term "commence construction" shall mean that a building permit has been issued and that construction activities on the school site have commenced, as evidenced by at least the start of clearing and/or grading of the school site. If CCS does not commence construction of one or more schools on that school site prior to the Construction Commencement Date, then the reservation of that school site for CCS shall terminate as of the Construction Commencement Date.

When a reservation of a school site for CCS terminates, the property subject to the reservation may be used by Chatham Park or other owner of the property for any purpose allowed under the Chatham Park Master Plan or other applicable zoning.

Upon request from CCS after a building permit has been issued for construction of one or more schools on a school site committed to by CCS, Chatham Park will convey that school site to CCS by special warranty deed, subject to all applicable title exceptions, including, without limitation, the Chatham Park Master Plan (including the Additional Elements), the applicable Small Area Plan, the Development Agreement, and applicable restrictive covenants. At any time prior to the earlier of conveyance of a reserved school site to CCS or CCS having made a commitment to a reserved school site, Chatham Park may relocate the school site to another comparable site that is owned by Chatham Park or to a comparable site owned by a different owner and consented to in writing by that owner, and which site is located within the applicable Small Area, any other Small Area, or any other property within one (1) mile of a boundary of Chatham Park. After CCS has made a commitment to a reserved school site, or a building permit has been issued for construction of one or more schools on the site, Chatham Park may relocate that reserved school site only with the consent of CCS.

CCS shall keep Chatham Park informed of its address for the purposes of delivery of notices of Infrastructure Availability or notices for any other purposes (the "Notice Address"). Notice of Infrastructure Availability may be given by CCS by any of the following methods, addressed to CCS at the most recent Notice Address provided by CCS to Chatham Park: (a) United States Postal Service mail, postage prepaid, and the date of delivery of such notice to CCS shall be the third business day immediately following the date of mailing of the notice; or (b) registered or certified mail through the United States Postal Service, postage prepaid, return receipt requested, and the date of delivery of such notice to CCS shall be the date delivery date shown on the return receipt; or (c) overnight delivery service - for example, Federal Express or United Parcel Service, and the date of delivery of such notice to CCS shall be deemed the date indicated in the records of the overnight delivery service. In like manner, Chatham Park shall keep CCS informed of its address for notice purposes, and the same delivery rules shall apply to notices from CCS to Chatham Park as described herein for notices from Chatham Park to CCS.

#### Location

#### **Objective 1:**

During the development of Small Area Plans in Chatham Park, determine sites to be reserved for future school sites to be acquired by CCS or other School Provider.

- a. When reasonably practicable, place schools on parcels meeting the optimum number of location criteria addressed in this Element. Sites should be evaluated by the following factors:
  - Safe and convenient accessibility to pedestrian and road networks.
  - Acreage to accommodate expansion for initial and future needs. Appropriate acreage shall be determined in accordance with standards for the applicable type of school (elementary, middle school, or high school, or combination thereof) established by the North Carolina Department of Public Instruction (or other applicable State of North Carolina governmental entity) and after consideration of educational facilities (e.g., a library), athletic facilities (e.g., athletic fields), and physical facilities (e.g., parking) that can be shared by two or more schools on the site or by a school and the Town, or by a school and Chatham County, or by a school and a private person or entity (e.g., a YMCA).
  - Compatibility with adjoining existing and proposed future development.
  - Aesthetically pleasing physical qualities with appropriate site suitability (e.g. soils, topography, etc.)
  - Proximity to other public facilities, such as Police, Fire, and Rescue services.
- b. When reasonably practicable, locate school sites, when situated in areas conducive to pedestrian traffic, to take advantage of maximum walking and biking distances of one mile for elementary schools and one and a half miles for middle and high schools.
- c. Locate schools where they can be served by public water and sewer.
- d. Secure proposed school sites as far in advance of construction as possible, to provide for availability of both the preferred location and the necessary site features.

- e. Encourage site dedications which provide sufficient usable acreage to meet locational criteria.
- f. When reasonably practicable, coordinate the design of the school site's active recreational areas with the design of Chatham Park's park and recreational sites, Town of Pittsboro parks, and/or Chatham County parks.

#### Sewer Reservation

## **Objective 2:**

CPI will reserve a portion of the 1.25 million gallons per day sewer capacity allocated to CPI in the City of Sanford wastewater treatment plant for all Chatham County public schools ("Schools") located in Chatham Park. These reservations will be described in Small Area Plans containing reserved public school sites that are approved by the Town. Such reservations shall be released if the reservation of the school site terminates as provided in this Element. Calculations of capacity reserved for public school sites shall be determined as follows (School Age Children or "Student" numbers per dwelling and percentages of Students for types of Schools are from information provided by Chatham County Board of Education ("BOE") - See Table 1):

According to the North Carolina Administrative Code (Note: GPD numbers may change from time to time and the applicable numbers at the time the reservation of sewer capacity is made will be used):

- Schools with cafeteria, gym, and showers (i.e. Middle and High Schools) require 15 gallons per day ("GPD") per Student
- Schools with cafeteria but no gym or showers (i.e. Elementary Schools) require 12 gallons per day per Student

According to Chatham County Board of Education numbers for School Age Children (Students):

- 60% are Elementary School Students
- 20% are Middle School Students
- 20% are High School Students

### Calculation Of Sewer To Reserve

- 1. Number of Residential Dwellings x number of Students/Residential Dwelling = number of Students generated by the approved development plan.
- 2. Number of Students generated by the approved Small Area Plan (initially) and approved development plan (finally) per School type x number of gallons per day per Student = # of gallons per day of Sewer to Reserve.

### **Example**

Development plans are approved for 135 townhomes and 454 single-family Lots, none of which are age-targeted housing. Assume 70% of the proposed residential dwellings are 3 bedrooms or less. BOE numbers are 0.45 students per dwelling for such residential dwellings of 3 bedrooms or less and 0.5 students per dwelling for such residential dwellings of more than 3 bedrooms.

```
589 residential dwellings x 70\% = 412 residential dwellings of 3 bedrooms or less 589 residential dwellings x 30\% = 177 residential dwellings of more than 3 bedrooms
```

412 residential dwellings x 0.45 (# of students/≤ 3 BR residential dwelling) = 185.4 Students 177 residential dwellings x 0.5 (# of students/> 3BR residential dwelling) = 88.5 Students

Total = 273.9 Students

```
Elementary: 273.9 x 60% = 164.3 Students x 12 GPD = 1,971.6 GPD
Middle: 273.9 x 20% = 54.8 Students x 15 GPD = 822.0 GPD
High School: 273.9 x 20% = 54.8 Students x 15 GPD = 822.0 GPD
```

TOTAL SEWER RESERVATION = 3,615.6 GPD

Sewer capacity reserved by CPI for Schools shall be released for other use at such time as (i) a School site reservation terminates, at which time the sewer capacity reserved for the type of School contemplated for that site shall be released, or (ii) actual sewer capacity for the applicable school is acquired by BOE from the Town or another provider that renders the sewer capacity reserved by CPI unnecessary.

# Section 4. Water Supply

Chatham Park plans to obtain all its potable water from the Town of Pittsboro's public water supply system. The Town currently operates a water treatment facility permitted at a capacity of 2.0 million gallons per day ("MGD") with proposed expansions to a total of 6.0 MGD. The Town has requested an additional 6.0 MGD of capacity as part of the Jordan Lake Coalition, which, if granted, would bring the Town's total capacity to 12 MGD. Chatham Park has developed a hydraulic water model for portions of Chatham Park to assist the Town in determining appropriate water main line sizes to be installed to provide adequate capacity, pressures and fire flows. These proposed improvements will follow the traditional model of developer funded infrastructure dedicated to the Town, with reimbursements to the developer or other person or entity who funds the improvements as provided in this Element.

As currently proposed and approved by the Town, the first schedule of water system improvements to serve the North Village of Chatham Park is planned in two (2) phases. Phase 1 consists of water main extensions and a 300,000 gallon elevated water storage tank that will provide a new higher pressure zone. Phase 1 has been constructed by Chatham Park prior to the adoption of this Element by the Town Board. Phase 2 will include improvements to the Town's existing high service pump station and a 1.0 million gallon elevated water storage tank. After completion of Phase 2, the 300,000 gallon elevated water storage tank will be

converted to a reclaimed water storage tank for the reclaimed water system serving the North Village.

These planned improvements, together with other future improvements, will be in accordance with the following design standards:

#### Location

### **Objective 1:**

Locate sites for adequate and appropriate infrastructures to transmit and distribute a safe and adequate potable water supply system which conforms to the land use goals of the Master Plan and the Small Area Plans for Chatham Park.

- a. Where feasible, elevated tanks may be grouped together and designed, as practicable, to harmonize with the surrounding existing and proposed development.
- b. Locate necessary booster pumping stations in buffered sites when feasible.
- c. Locate water mains to minimize impacts to environmental features such as wetlands, riparian buffers, streams and forested areas.
- d. Locate water system features like control valves, pressure reducing valves, and master meters in below grade vaults and, when feasible, in buffered sites.

#### Character and Extent

### **Objective 2:**

Plan, design and provide for water system infrastructure to transmit and distribute a safe and adequate potable water supply to Chatham Park residents.

- a. Elevated water storage tanks shall be designed in accordance with the state of North Carolina requirements and may include additional design features pertinent to Chatham Park. Elevated tank(s) may be provided, as needed, in different pressure zones in order to maintain adequate pressure and fire flows for each zone.
- b. Provide for and maintain a hydraulic water model of the water distribution system for part or all of Chatham Park to assist the Town in determining appropriate water main line sizes to be installed to provide adequate capacity, pressures and fire flows. This hydraulic water model may be updated from time-to-time to reflect actual water demands and to reflect adjustments to Small Area Plans and development plans in Chatham Park. As determined by the Town, the hydraulic water model(s) provided by Chatham Park may be used in developing the Town's own hydraulic model of the Town's water distribution system.
- c. Potable water demands shall be determined in accordance with State of North Carolina requirements.
- d. All potable water infrastructure improvements shall be designed and plans prepared in accordance with State of North Carolina requirements and the Town's standard details and requirements.
- e. All potable water infrastructure plans shall be submitted to the Town and to the appropriate State of North Carolina agency, department, division, and/or section for permit approvals and any required authorization to construct.

#### Reimbursement

### **Objective 3:**

Establish a procedure to reimburse a party who expends funds for construction of water infrastructure improvements.

- a. Reimbursement for funds expended for water infrastructure improvements within and outside of Chatham Park will be in accordance with the "Development Agreement" (required by the Master Plan) or other agreements between the Town and Chatham Park. Acquisition of easements for water infrastructure improvements outside of Chatham Park also may be eligible for reimbursement.
- b. Reimbursement may be in the form of development fee credits or other type of reimbursement specified in the Development Agreement or other agreements.

### Operation and Maintenance

### **Objective 4:**

Provide for water infrastructure improvements to be owned and operated by the Town or appropriate private utility provider.

- a. Ownership of water infrastructure improvements constructed in Chatham Park will be transferred to the Town or appropriate private utility provider (who later may transfer ownership to the Town).
- b. Following transfer of ownership to the Town, which typically will occur after the improvement has been constructed and accepted by the Town for maintenance after the expiration of any applicable warranty period, the Town will assume all obligations for operation and maintenance of the applicable improvement.

# Section 5. Sanitary Sewer

Chatham Park plans to provide sanitary sewer services through a multi-faceted approach. It may include a combination of collaborative use of existing and improved public facilities, construction of new private facilities, construction of one or more lines to the City of Sanford or other governmental entity to transport wastewater for treatment, and construction of new regional facilities. An overarching goal will be to maximize the conservation and reuse of water resources. In furtherance of this goal, a reclaimed water distribution system will be utilized in Chatham Park where practicable. Sanitary sewer improvements will be in accordance with the following design standards:

### Location

### Objective 1:

Locate sites for adequate and appropriate infrastructure to collect, transport, and treat sewage and distribute reclaimed water for beneficial reuse.

- a. Where located in Chatham Park, sewer treatment facilities will be located and designed to harmonize as may be practical with the surrounding development.
- b. Treatment facilities will be located and designed to minimize, to the extent

- reasonably practicable, any negative aesthetic or sensory impacts, and to minimize associated ingress/egress impacts.
- c. Locate required pumping stations in buffered sites when feasible.
- d. When feasible, locate system features like control valves, air release valves, and master meters in below grade vaults and in buffered sites.

#### Infrastructure

### **Objective 2:**

Plan, design and provide for system infrastructure to collect, transport, and treat sewage and to distribute reclaimed water for beneficial reuse.

- a. Make mutually agreeable best use of existing Town sewage treatment capacity and reuse water through strategic interconnections with existing Town system.
- b. Provide for additional sewage treatment capacity and reuse water through one or more additional sewage treatment plants.
- c. Provide for additional future sewage treatment capacity through construction of a larger local regional treatment facility and/or construction of conveyance facilities to utilize capacity offered by the City of Sanford or other governmental entity.
- d. A reclaimed water distribution map or drawing will be provided in each Small Area Plan submitted to the Town for approval, which will show the existing and proposed street rights of way in which "purple pipe" for reclaimed water distribution for irrigation use, vehicle washing, or other similar use will be installed by Chatham Park in one side of the right of way. Subject to applicable ordinances, regulations, and/or rules of the Town, other governmental entity, or private utility provider who provides reclaimed water to users in Chatham Park (the applicable entity being referred to herein as the "reclaimed water provider"), developers and/or owners of non-residential properties and residential properties adjoining a street right of way in which purple pipe is installed and who desire to use reclaimed water, may, at their expense, connect to the purple pipe.

The opportunity to become a reclaimed water customer of the Town, other governmental entity, or private utility provider is subject to availability of reclaimed water from the reclaimed water provider and is subject to the applicable provisions of this Element, the applicable provisions of the Small Area Plan that governs the customer's property, and either the ordinances and regulations of the Town or other governmental entity that provides the reclaimed water or the policies and procedures of the private utility provider that provides the reclaimed water.

The applicable Small Area Plan may designate an amount or percentage of available reclaimed water reserved for non-residential uses; otherwise, the use of available reclaimed water will be on a "first come, first served" basis or other basis provided for in applicable Town ordinances or regulations.

e. Demands for sewer treatment capacity shall be determined in accordance with State of North Carolina requirements.

- f. All sewer infrastructure improvements shall be designed and plans prepared in accordance with State of North Carolina and the Town's standard details and requirements.
- g. All sewer infrastructure plans shall be submitted to the Town and to the appropriate State of North Carolina department, agency, division, and/or section for permit approvals and to obtain any required authorization to construct.

#### Reimbursement

### **Objective 3:**

Establish a procedure to reimburse a party who expends funds for construction of sewer infrastructure improvements.

- a. Reimbursement for funds expended for sewer infrastructure improvements within and outside of Chatham Park will be in accordance with the "Development Agreement" (required by the Master Plan) or other agreements between the Town and Chatham Park. Acquisition of easements for sewer infrastructure improvements outside of Chatham Park also may be eligible for reimbursement.
- b. Reimbursement may be in the form of development fee credits or other type of reimbursement specified in the Development Agreement or other agreements.

### Operation and Maintenance

# **Objective 4:**

Provide for sewer infrastructure improvements to be transferred to the Town.

- a. Ownership of sewer infrastructure improvements constructed in Chatham Park will be transferred to the Town or appropriate private utility provider (who later may transfer ownership to the Town).
- b. Following transfer of ownership to the Town, which typically will occur after the improvement has been constructed and accepted by the Town for maintenance after the expiration of any applicable warranty period, the Town will assume all obligations for operation and maintenance of the applicable improvement.

#### Section 6. Parks and Recreation

The provision of parks and recreation facilities is one of the quality of life factors that demonstrate the Town's commitment to meeting the needs of its citizens. A good park system is developed through a systematic approach to assessing population growth, adequate park acreage and locations, safe and attractive facilities, maintenance standards, funding, and the ability to adapt to change in a proactive manner as citizen wants and needs evolve. National recreational standards have been developed by the National Recreation and Park Association (NRPA), and these can be helpful as communities assess their recreational needs and how best to meet them. However, the uniqueness of each community due to geographical, cultural, climatic, and socioeconomic characteristics makes it more likely that each community will need to develop its own standards for recreation, parks, and open space. This Parks and Recreation section of this Element takes national standards and the requirements of the Master Plan into account to establish an appropriate service level for Chatham Park.

As used in Section 6 of this Element, CPI refers to Chatham Park Investors LLC or other applicable developer of land in Chatham Park.

## Park Classifications and Criteria

The Parks Classification Table below is from the NRPA Parks, Recreation, Open Space and Greenways Guidelines. This table describes park classifications along with typical locations and sizes. Actual locations and sizes may vary.

	Parks Classification Table				
Park Classification	General Description	Location Criteria	Size Criteria		
Pocket Parks & Mini-Parks	Used to address limited, isolated, or unique recreation needs.	Less than a ¼ mile distance in residential setting.	Up to 5 acres in size.		
Neighborhood Parks	Neighborhood Parks remain the basic units of the park system and serve as the recreational focus of the neighborhood. Focus is on the informal, active and passive recreation.	½ mile distance and uninterrupted by non-residential roads and other physical barriers.	5 acres is considered adequate size. 5-10 acres is optimal.		
School Parks	Depending on the circumstances, combining parks with school sites can fulfill the space requirements for the other classes of parks, such as neighborhood, community, sports complex, and special use.	Determined by school property locations.	Variable – depends on function.		
Community Parks	Serve broader purpose than the neighborhood parks. Focus is on meeting community-based recreational needs, as well as preserving unique landscapes and open spaces.	Determined by the quality and sustainability of the site. Usually serves two or more neighborhoods and 2 to 3 mile distance.	As needed to accommodate desired uses. Usually between 25 and 50 acres.		
Natural Resource Areas	Land set aside for preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering.	Resource availability and opportunity.	Variable		

Sports Complex	Consolidates heavily programmed athletic needs and associated facilities to larger and fewer sites strategically located throughout the community.	Strategically located, community-wide facilities.	Determined by projected demand. Usually 25 acres or more with 40-80 acres being optimal.
Private Parks/Recreational Facilities	Parks and recreation facilities that are privately owned yet contribute to the public park and recreation system.	Variable – dependent on specific use.	Variable
Regional Parks	Typically offer a wide variety of active or passive recreational opportunities and owned by the County or State.	Variable – dependent on specific use.	As needed to accommodate desired uses. Site varies from 50-1,000 acres.

### **Objective 1:**

Locate new parks and other recreation facilities that are convenient to the greatest number of Chatham Park residents and area facility users.

- a. Avoid service area overlap between like facilities unless this overlap is necessary to correct service deficiencies.
- b. Provide park locations for the larger facility types as part of Small Area Plans.
- c. Provide park locations for smaller facility types pocket parks and neighborhood parks either in Small Area Plans or in development plans.
- d. Provide park locations such that most of the dwelling units in Chatham Park are within one-half (1/2) mile of a recreation facility location.

#### **Objective 2:**

Develop a diversified park system that will satisfy the varied recreational needs of Chatham Park's residents and protect and enhance the quality of life in the Pittsboro area.

- a. Develop and implement facilities and programs that encourage public participation in both active and passive indoor/outdoor recreation programs.
- b. Work with the Town on a regular basis to revise the Town's Comprehensive Recreation Plan, with citizen preferences serving as a major input to this process.
- c. Explore the development of a capital improvement program that also identifies all necessary funding sources.
- d. Update and/or renovate existing parks and recreation facilities to maintain and/or improve the existing level of service.
- e. Design outdoor recreation facilities that are accessible to individuals and organized groups of all physical capabilities, skill levels, age groups, and income levels.
- f. Incorporate public art into the parks and other recreation facilities where appropriate.

## **Objective 3:**

Create a system of greenways between residential neighborhoods, businesses, schools, public facilities, and other activity centers as an alternative to automobile transportation.

- a. Utilize greenways, multi-use paths, and sidewalks, wherever possible to connect residential areas with schools, parks and other public facilities.
- b. Design an interconnected, multifunctional parks and open space system which protects important natural, cultural, and visual resources while providing appropriate opportunities for recreation.
- c. Create trailhead improvements that support the greenway system with interpretive and directory signage, rest areas, drinking fountains, landscaping, restrooms, parking, and other services.

#### Character and Extent

### Objective 1:

Expand economic growth, improve the quality of life for citizens, and promote economic development opportunities through parks and recreation planning and programming.

- a. Promote the benefits of parks and recreation through creative planning and programming, realizing that these benefits can be effective tools for increasing property values, promoting economic development by attracting new businesses, improving the Town's image, and enhancing public health and wellbeing.
- b. Create and promote recreational and cultural events which enhance the public health and wellbeing.

### Objective 2:

Increase safety and reduce maintenance and operational costs throughout the park system.

- a. Reduce maintenance costs by using materials that require less maintenance and by analyzing the life cycle costs of these materials.
- b. Evaluate standards to assess and correct safety related issues at existing facilities.
- c. Explore the use of vandal-resistant materials in new construction, and work with the police and fire departments to reduce the potential for vandalism in public areas.
- d. Promote the use of native plant materials and other drought tolerant species in all park and recreation facilities.

### **Objective 3:**

Provide land for Parks and Greenways on a timely basis as needed to serve the residents of Chatham Park:

### Qualifying Park Land

Sections 1.5 and 4.5 shown in the Master Plan are land areas that qualify as "Park Land" or "Park". Core Conservation Areas #s 2 and 3 described in the Open Space Element qualify as Park Land to the extent not applied to satisfy open space requirements for Chatham Park. In addition to the foregoing, the following land areas qualify as Park Land for Chatham Park:

- 1. Land identified as Park Land or Park on a plat approved by the Town and recorded in the office of the Chatham County Register of Deeds including, without limitation, a Park of ten (10) acres or more within each "Park Service Planning Area" as defined in the Master Plan;
- 2. Private park/recreation areas open to use by the public and located within residential developments and mixed-use developments as approved by the Town;
- 3. Small scale urban spaces, one-half acre or larger in area, located to accommodate aesthetic amenities or a variety of passive, active and entertainment activities for the public, and designated as Park Land or Park in a development plan or on a recorded plat approved by the Town;
- 4. Land not located in a regulated buffer that is approved by the Town for greenway, is dedicated to the Town or other governmental entity, and on which a paved path or other type of path approved by the Town has been constructed;
- 5. Land used for multi-use paths located outside of a publicly dedicated street right of way and which is not required by NCDOT complete streets requirements;
- 6. Natural areas located within recorded conservation easements, to the extent not applied toward satisfaction of Chatham Park Open Space requirements and which has been approved by the Town; and
- 7. Other areas approved by the Town as Park Land.

#### Park Land Provided

In accordance with the Master Plan, Park Land is land intended to be used for either active or passive recreation purposes. Park Land that is conveyed or otherwise dedicated to the Town is intended to become part of the Town's recreation system. Subject to Town approval, Park Land may be conveyed or otherwise dedicated to other governmental entities. As provided above, other Park Land can be privately owned. Park Land conveyed or otherwise dedicated to the Town or other governmental entity also is referred to herein as "Public Park Land" or "Public Park". Land for Chatham Park that satisfies the Park Land requirements of the Master Plan shall be provided at a ratio of no less than 1/33rd acre per dwelling unit constructed, which would result in 667 acres of Park Land if the maximum number of dwelling units (22,000) allowed by the Master Plan is constructed. However, in order to expedite provision of Park Land, the Master Plan requires that, until such time, if any, that the maximum required amount of Park Land (667 acres) has been provided, Park Land shall be provided at a rate of 1/25th acre per dwelling unit constructed in Chatham Park. At the rate of 1/25th acre per dwelling unit, the maximum required 667 acres of Parkland would be provided when 16,675 dwelling units have been constructed in Chatham Park (the chart on page 37 of the Master Plan is amended by this Element to change 22,000 to 16,675).

Proposed locations and previously dedicated locations for Public Parks of five (5) acres or greater in size will be shown on Small Area Plans, with exact locations not previously finalized to be finalized as subdivision or site plans for dwelling units are submitted to and approved by the Town and surveys are completed. Proposed locations and previously dedicated locations for Public Parks of less than five (5) acres will be shown on subdivision plans or site plans submitted to and approved by the Town, with exact locations not previously finalized to be finalized as surveys are completed. The boundaries of all Public Park Land sites will be surveyed and shown on plats recorded in the office of the Register of Deeds for Chatham County, North Carolina. Proposed locations of private parks may be shown on Small Area Plans or on subdivision plans or site plans, but also may be included as part of common area for the developments in which they are located.

With the submission to the Town of each subdivision plan or site plan for dwelling units in Chatham Park, information will be provided as to the previous number of dwelling units in Chatham Park approved by the Town, the amount of Park Land previously provided for Chatham Park (either by land or payment-in-lieu or park land equivalent), and any new Park Land to be provided (either by land or payment-in-lieu or park land equivalent) with that subdivision plan or site plan. Land to satisfy the Park Land requirements of the Master Plan for Chatham Park may be provided on land that is located in Chatham Park, or on land within one (1) mile of any boundary of Chatham Park, or on any other land approved by the Planning Director. For the purpose of satisfying Park Land requirements, Chatham Park shall be considered as one development.

### Nature of Public Park Land to be Dedicated

Except as otherwise approved by the Town Board or other applicable governmental entity, all Public Park Land shall meet the following criteria:

### (1) Unity.

Each Public Park Land site shall form a single parcel of land, except where the Town Board determines that two (2) or more parcels would be in the best interest of the public, given the type and distribution of Park Land needed to adequately meet the requirements of this Element. Public Park Land for greenways is not subject to the requirements of this subsection.

### (2) <u>Usability</u>.

Except as otherwise provided in this subsection, at least sixty-five percent (65%) of each Public Park Land site intended primarily for active recreational use shall be located outside Flood Hazard Areas, riparian buffers, lakes, or other water bodies, and areas with slopes greater than twenty (20) percent<sup>1</sup> (the foregoing being referred to herein as the "65% requirement"), and at least ninety-five (95) percent of the total Public Park Land shall be located outside of wetlands subject to Federal or State of North Carolina regulatory jurisdiction. Lakes, ponds, creeks, or other water

<sup>&</sup>lt;sup>1</sup> Slope calculations under this subsection shall be provided by a licensed professional engineer or licensed landscaped architect.

bodies, and wetlands falling under Federal or State of NC jurisdiction qualify as Public Park Land only if sufficient abutting land is dedicated as Public Park Land. The following are not subject to the requirements of this Usability subsection and shall be excluded when calculating the foregoing percentages: Public Park Land for greenways; the Park Land in Sections 1.5 and 4.5 as shown on the Master Plan; and a Public Park to be located in the North Village portion of Chatham Park, generally in the location shown on Exhibit 1 to this Public Facilities Element, with the exact location of this Public Park to be shown on applicable development plan(s). This Public Park in North Village may contain a pond that can serve as a stormwater control measure under the Stormwater Element for more than one Lot.

With respect to Public Park Land sites, the 65% requirement may be reduced to not less than 60% to allow for isolated areas of steep slopes greater than 20%, subject to the following: in the applicable Public Park Land site, no individual area of isolated steep slopes greater than 20% may exceed one-half (1/2) of the total area of isolated steep slopes of greater than 20%; and areas of steep slopes greater than 20% adjacent to riparian buffers, lakes and other water bodies, flood hazard areas, and wetlands shall not qualify as isolated areas of steep slopes greater than 20% for the purposes of this paragraph.

With respect to proposed Public Park Land sites that do not meet the 65% requirement prior to development of the site, with the approval of the Town CPI may grade the site so that it meets the 65% requirement. Provided, the amount expended for such grading shall not qualify as Park Land Equivalent money under this Element.

# (3) Shape.

The shape of the portion of Public Park Land that is deemed suitable for active recreation shall be sufficiently square or round to be usable for any or all recreational facilities and activities, such as athletic fields and tennis courts, when a sufficient amount of land is dedicated to accommodate such facilities. Public Park Land for greenways is not subject to the requirements of this subsection.

### (4) Access.

Public access to Public Park Land shall be provided either by adjoining public street frontage or by a dedicated public easement which connects the dedicated land to a public street or right-of-way. Gradients adjacent to existing and proposed streets shall allow for reasonable access to Public Park Land. Where the dedicated land is located adjacent to a street, CPI shall remain responsible for the installation of utilities, sidewalks, and other improvements required along that street segment. Pedestrian access to Public Park Land used for greenway where such land does not adjoin a public right of way shall be at least ten (10) feet wide, unless otherwise allowed by the Town Board.

### (5) Infrastructure.

The following infrastructure shall be provided to each Public Park Land site by CPI, or financial security for completion of such infrastructure provided in accordance with Town requirements, either prior to acceptance by the Town of the Public Park Land or, with approval of the Town Board, after acceptance by the Town of the Public Park Land.

- (a) Publicly dedicated street and, if required by applicable Town ordinances, sidewalk, adjoining a boundary of the Public Park Land site, or an access easement to a publicly dedicated street approved by the Town Board. For the foregoing purposes, a "publicly dedicated street" is (i) an existing public street or (ii) a street that has been constructed and offered for dedication to the Town or other applicable governmental entity or, if construction has not been completed, financial security for completion of construction has been provided in accordance with applicable Town requirements. Provided, however, public greenways and public multi-use paths shall have access to publicly dedicated streets as shown on Small Area Plans and development plans approved by the Town.
- (b) A publicly dedicated water line and a publicly dedicated sanitary sewer line shall be constructed to each Public Park Land site (whether on the site or stubbed to the site), excluding water and sanitary sewer for public greenway and public multi-use path land, and excluding sanitary sewer for any Public Park Land site on which the Town does not intend to construct restroom facilities.
- (c) Reclaimed water lines shall be constructed to Public Park Land sites, excluding public greenway and public multi-use path land, in accordance with the reclaimed water line distribution map or drawing included in the applicable Small Area Plan approved by the Town.

#### **Excess Park Land**

Park Land provided in Chatham Park in excess of Park Land required by the Master Plan is referred to herein as "Excess Park Land". Excess Park Land includes each of the following:

- (a) Park Land provided for Chatham Park that exceeds the amount of Park Land required by the Master Plan; and
- (b) "Park Land Equivalent" for money spent by CPI for improvements to Public Park Land, except for money spent on the following: improvements for greenways; grading a Public Park Land site to enable the site to meet the 65% requirement, and improvements to Public Park sites as described in the immediately following section of this Element entitled "Public Park Facilities". For the purposes of determining the Park Land Equivalent, the "per acre value" of funds spent on improvements to Public Park Land first must be determined. The per acre value shall be determined in the same manner and subject to the same requirements as determination of fair market value for payment-in-lieu as provided in this Element. The Park Land Equivalent is determined by dividing the total amount of money spent on the improvements by the per acre value. For example, if the amount spent on improvements is \$600,000.00 and the per acre value is \$150,000.00 per acre, the Park Land Equivalent is 4 acres (\$600,000.00 ÷ \$150,000.00 = 4).

Excess Park Land, as approved by the Town, may be applied by CPI to satisfy Park Land dedication requirements for Chatham Park, additional land that is added to Chatham Park, and/or land located within one (1) mile of a boundary of Chatham Park that is owned by CPI or an entity affiliated with CPI, or owned by a purchaser of such land from CPI or its affiliated entity to whom the right to apply such Excess Park Land has been assigned.

### **Public Park Facilities**

CPI shall spend the following amounts for improvements (other than maintenance facilities) to the following Public Park sites in Chatham Park. For purposes of Section 6 of this Element, the term "improvements" to Public Park sites includes, without limitation, clearing, grading, and other site preparation, paving, sedimentation and erosion control, stormwater control measures, surveying other than boundary surveying, soil remediation, installation of water and sewer lines and associated facilities on the site, and construction or installation on the site of buildings and other structures, bathroom facilities, and recreation facilities (for example, ball fields, soccer fields, tennis courts and courts for other sports, trails, swimming pools, and playgrounds), and provision of recreation equipment:

(a) \$500,000.00 per Public Park site for improvements to one (1) Public Park site in each of the seven (7) "Park Service Planning Areas" identified in the Master Plan, subject to agreement with the Town on location of the Public Park site and the applicable improvements. Each such Public Park site is referred to herein as a "Park Service Planning Area Site". As agreed upon by CPI and the Town, more than \$500,000 may be spent by CPI for improvements to any one (1) or more of the seven (7) Park Service Planning Area Sites. However, the total expenditure by CPI for all seven (7) Park Service Planning Area Sites will not be required to exceed \$3,500,000.

In addition to the expenditure of \$500,000.00 for improvements to each of the Park Service Planning Area Sites, CPI will provide a park master plan for each of the two (2) Park Service Planning Area Sites in the North Village, together with detailed design plans for the improvements to be paid for by CPI in those two (2) Park Service Planning Area Sites. The foregoing park master plans and detailed design plans are subject to Town approval.

(b) \$3.0 million per site for improvements to two (2) "Large Public Park Sites" in Chatham Park, one (1) in the North Village and one (1) in the South Village, with exact locations of these two (2) Large Public Park Sites to be agreed upon by the Town and CPI. Each of these two (2) Large Public Park Sites may consist of one of the following types of Parks: School Park; Community Park; Natural Resource Area; Sports Complex; or Regional Park. The Town may expend \$3.0 million for improvements to each of the two (2) Large Public Park Sites, on such schedule as determined by the Town. In addition to the expenditure of \$3.0 million for improvements to the two (2) Large Public Park Sites, for each of those two (2) Large Public Park Sites CPI will provide a park master plan, together with detailed design plans for the improvements to be paid for by CPI. The foregoing park master plan and detailed design plans are subject to Town approval.

- (c) A total of \$2.0 million for improvements to up to twenty-eight (28) "Public Mini-Park" sites in Chatham Park, the locations of such Public Mini-Park sites and amount to be expended by CPI for the applicable Public Mini-Park site to be as agreed by CPI and the Town. CPI shall dedicate or convey to the Town one (1) Public Mini-Park site for each 785 dwelling platted units in Chatham Park. The agreed upon funds to be expended by CPI for the applicable Mini-Park shall be expended prior to platting of the first dwelling unit in the next group of 785 dwelling units.
- (d) Except as otherwise agreed by CPI and the Town Board, CPI funds for improvements to the seven (7) Park Service Planning Area Sites, the Large Public Park Site in the North Village, and the Large Public Park Site in the South Village shall be expended as follows. As used in Section 6 of this Element: (a) "dwelling unit" shall mean and include a house on a single-family detached Lot, a townhouse, a condominium unit, or an apartment unit; and (b) the words "platted" or "platting" or substantially similar wording shall mean the following: (x) with respect to single-family detached Lots and townhouse Lots, the recording of a plat of those Lots in the office of the Register of Deeds for Chatham County, North Carolina; and (y) with respect to condominium units and apartment units, the issuance of a certificate of occupancy for the units.
  - (i) With respect to each of the seven (7) Park Service Planning Area Sites, within three (3) years immediately following the platting of the 1,500<sup>th</sup> dwelling unit in the applicable Park Service Planning Area, CPI shall be required to expend \$500,000.00 for improvements to the Park Service Planning Area Site in that Park Service Planning Area. Provided, if the agreed upon improvements for any of these seven (7) Park Service Planning Area Sites to be completed with CPI funds are completed for less than \$500,000.00, the required expenditure for that Park Service Planning Area Park site shall be deemed satisfied and the difference between \$500,000.00 and the amount actually expended by CPI shall be expended by CPI for improvements to one or more of the other seven (7) Park Service Planning Area Sites or as otherwise agreed by CPI and the Town.
  - (ii) With respect to the Large Public Park Site in the North Village, CPI shall be required to expend \$3.0 million for improvements to that site within five (5) years immediately following the platting of the 3,000<sup>th</sup> dwelling unit in Chatham Park. Provided, if the agreed upon improvements to be completed with CPI funds are completed for less than \$3.0 million, the required expenditure by CPI for that Large Public Park Site in the North Village shall be deemed satisfied, and the difference between \$3.0 million and the amount actually expended by CPI shall be expended by CPI for improvements to the Large Public Park Site in the South Village or as otherwise agreed by CPI and the Town.
  - (iii) With respect to the Large Public Park Site in the South Village, CPI shall be required to expend \$3.0 million for improvements to that site within five (5) years immediately following the platting of the 12,500th dwelling unit in Chatham Park. Provided, if the agreed upon improvements to be completed with CPI funds are completed for less than \$3.0 million, the required expenditure by CPI for the Large Public Park Site in the South Village shall be deemed satisfied, and the difference between \$3.0 million and the amount actually expended by CPI shall be expended by CPI for improvements to the Large Public Park Site in the North Village or as otherwise agreed by CPI and the Town.
  - (iv) As agreed upon by CPI and the Town, CPI may spend more than \$3.0 million on improvements to either of the two (2) Large Public Park Sites. In such event, the amount required to be expended by the Town for improvements to the first Large Public Park Site

and the amount required to be expended by CPI for improvements to the second Large Public Park Site shall be reduced by the amount CPI expends in excess of \$3.0 million on the first Large Public Park Site, and the amount required to be expended by the Town for improvements to the second Large Public Park Site shall be increased by the amount CPI expends in excess of \$3.0 million on the first large Public Park site. Provided, however, the maximum required expenditure by CPI and the Town is a total of \$6.0 million each for the two (2) Large Public Park Sites. Any amount in excess of \$6.0 million spent by CPI on improvements to the two (2) Large Public Park Sites may qualify as Park Land Equivalent pursuant to the Excess Park Land subsection of Section 6 of this Element.

(e) In determining locations of Public Park sites and, where applicable, the amount of funds to be expended by CPI for improvements to Public Park sites, CPI and the Town shall act reasonably and in the best interests of the residents of the Town. Unless otherwise allowed by the Town Board, funds required to be expended by CPI for improvements to the applicable Public Park site shall be expended prior to acceptance by the Town of dedication or conveyance of that Public Park site.

### Bicycle Lanes and Multi-Use Paths

Bicycle lanes and multi-use paths in Chatham Park have been or will be constructed as follows:

- (1) Bicycle lanes on both sides of the paved portions of those streets in Chatham Park determined as provided herein.
- (2) Multi-use paths on one side of those streets in Chatham Park determined as provided herein. Multi-use paths provide connectivity to various streets that include bicycle lanes and to various greenways, typically will be constructed outside of the paved portions of streets, and may be located in or outside of street rights of way. Multi-use paths typically will replace sidewalks and will be ten (10) feet wide, with five (5) feet in the street right of way and five (5) feet outside of the street right of way.
- (3) The general locations of streets that include bicycle lanes and general locations of multi-use paths in the North Village are shown on Exhibit 2 to this Public Facilities Element. The general locations of streets that include bicycle lanes in the South Village are shown on the Master Plan. More specific locations of streets that include bicycle lanes and of multi-use paths shall be shown on Small Area Plans. The final locations and alignments of streets and multi-use paths will be shown on applicable development plans and construction drawings approved by the Town.

### Town Maintenance Facility

As determined by the Town, a maintenance facility (including building and yard) will be included in the planning and design for either the Large Public Park Site in the North Village or the Large Public Park Site in the South Village. This maintenance facility will be sized to serve the maintenance needs for Public Parks and Town owned public facilities in Chatham Park.

### **Recreation Impact Fees**

Other than as required or allowed by this Element or by applicable ad valorem property taxes (including any taxes to be paid in a special assessment tax district applicable to any part or all of Chatham Park), Town ordinances requiring dedication or conveyance of land for Public Parks, construction of or payment for improvements to or maintenance of Public Parks, provision of funds for future acquisition of land for Public Parks, payment-in-lieu of dedication or conveyance of land for Public Parks, or payment of recreation impact fees (by whatever name denominated) for acquisition of land for Public Parks or for improvements to or maintenance of Public Parks, by owners, developers, or sub-dividers of land, shall not apply to Chatham Park.

## **Greenways Provided**

A preliminary greenway plan was provided as part of the Master Plan. A more detailed preliminary greenway plan for the applicable Small Area(s) will be provided with the submittal of each Small Area Plan, and locations will be finalized as development plans are submitted and approved and surveys are completed. In accordance with the Master Plan, the land area (i.e., acreage or square footage) of greenways qualifies either as Park Land (if located outside of a regulated buffer) or Open Space (if located within a regulated buffer). As determined by the Town or other applicable governmental entity, greenways intended to be part of the Park Land in Chatham Park either will be conveyed or dedicated by easement to the Town or other applicable governmental entity in a recorded document and/or plat. A typical greenway lot or easement in Chatham Park will be 30 feet wide and will include within it a trail that is 10 feet wide. Greenway trails within Chatham Park typically will be paved to reduce maintenance costs, but certain sections, as necessary to satisfy riparian buffer requirements or as otherwise approved or required by the Town or other applicable governmental entity, may be constructed of mulch or other allowable materials that will provide a different trail experience. Pedestrian bridges in greenways are not required to be paved. Greenways with the required improvements will be provided in Chatham Park at the rate of one (1) mile of greenway for each 700 dwelling units in Chatham Park that have been platted. For example, one (1) mile of greenway will be provided for the first 700 dwelling units in Chatham Park that are platted, one (1) mile of greenway for the second 700 dwelling units in Chatham Park that are platted, and so on. The Town shall not be required to approve the final plat to be recorded for dwelling unit 701 until the applicable mile of greenway has been provided. Greenway is deemed to be provided when constructed and when shown on a plat recorded in the office of the Chatham County Register of Deeds or dedicated or conveyed to the Town by a document recorded in the office of the Chatham County Register of Deeds. Financial security for construction of greenway improvements may be provided in the same manner as for construction of streets.

### Payment-in-Lieu

CPI may propose a "payment-in-lieu" for part of the Park Land otherwise required for Chatham Park by the Master Plan and this Element. The Town Board shall determine whether to accept the offer of a payment-in-lieu of Park Land, upon consideration of the following:

- (a) Any applicable parks, recreation, greenway, or open space master plan for the Town;
- (b) The recommendations of any applicable parks and recreation committee or advisory board for the Town;
- (c) Topography, geology, access, and location of land in the development available for Park Land; and
  - (d) Size and shape of the development and land available for Park Land.

Where a fee is to be paid in-lieu of Park Land with respect to a development, the amount of such fee shall follow the published Town of Pittsboro payment-in-lieu fee schedule, if any. Provided, and notwithstanding any other provisions of this Element or other Town ordinances, the total fee-in-lieu of dedication charged for Chatham Park shall not exceed the fair market value of the land area that would have otherwise been required to be dedicated by the applicable subdivision or site plan. For these purposes fair market value is to be determined with respect to the applicable subdivision or site plan at the time the initial application for review is submitted to the Town. The process for determining fair market value shall be as follows:

- (a) CPI shall submit an appraisal completed within twelve (12) months prior to the date the initial application for review is submitted to the Town;
- (b) CPI's appraisal shall be reviewed by a review appraiser retained by the Town. The review appraiser shall either concur with CPI's appraisal or recommend that a new appraisal for the Town be prepared;
- (c) If a new appraisal is recommended, the Town's appraisal shall be done by an appraiser from a Town approved list at the Town's expense. The decision of the Town's appraiser shall constitute the Town's decision on fair market value; and
- (d) In the event of a disagreement about fair market value after completion of the Town's appraisal, the fair market value shall be determined by not less than majority vote of a "Special Committee" consisting of CPI's appraiser, the Town's appraiser, and a third appraiser selected by CPI's appraiser and the Town's appraiser. The expense of the third appraiser shall be borne equally by the Town and CPI. The fair market value determined by the Special Committee shall not be less than the lower of the appraised fair market values in CPI's appraisal and the Town's appraisal, and not more than the greater of the appraised fair market values in CPI's appraisal and the Town's appraisal.

(e) All of the appraisers involved in the foregoing appraisal process shall be licensed by the State of North Carolina.

Fees collected in lieu of land dedications shall be held in a special fund by the Town, and the funds shall be used by the Town for the purpose of acquiring and developing public recreation land and facilities in or in the general vicinity of Chatham Park and for no other purpose. The depository for such funds may be the same as permitted for other funds of the town and pending their expenditure, such funds may be invested as other funds of the Town. The Town may, at its discretion, add additional monies to the fund for the purpose of acquiring and developing public recreation land and facilities to be used for public recreational purposes. On all matters not specifically provided for in this paragraph, the Local Government Budget and Fiscal Control Act (Section 159-7 et seq. of the North Carolina General Statutes, or any replacement Statute) shall be controlling.

### Section 7. Town Administrative Services

Staffing considerations for public facilities required to support services provided by the Town of Pittsboro are typically controlled by the municipality. This portion of the Public Facilities Element is presented in order to provide guidance to the Town as it analyzes its need to add the necessary staff due to growth that will result from the development of Chatham Park. To assist the Town until such time as property tax revenues collected from Chatham Park total \$300,000.00 or more per annum, Chatham Park Investors LLC has entered into a financial contribution agreement with the Town to provide funds to help defray the additional costs expected to be incurred by the Town in dealing with development in Chatham Park.

The following departments will be included in this personnel analysis: administration, finance, economic development, planning, code enforcement, police, fire and rescue, engineering, public works, parks and recreation and public utilities.

### **Objective:**

Provide an appropriate level of municipal personnel to conduct Town business at an acceptable level of effectiveness.

- 1. Each Small Area Plan submitted for Chatham Park will provide an estimate of the number of personnel the Town will need on a department by department basis based on population projections for that Small Area at full build out.
- 2. Each Small Area Plan submitted for Chatham Park also will include development phasing information to help the Town estimate the number of personnel the Town will need to add as development occurs.

#### Public Works Site

CPI will collaborate with the Town to identify and shall reserve for the Town a site of up to five (5) acres in size, either in Chatham Park, or within one (1) mile of a boundary of Chatham Park, or at such other mutually agreeable location, as a "Public Works Site" for use by the Town as a public works administrative site, which may include office space and storage and repair of vehicles, equipment, and other items used by the Town to maintain its buildings, parks, and other public facilities, including construction of improvements for the foregoing purposes, The proposed Public Works Site shall be identified as soon as reasonably practicable upon submittal of the first Small Area Plan for the South Village following the first to occur of the following three (3) occurrences:

- (1) Platting of the 10,000<sup>th</sup> dwelling unit in Chatham Park. As used in Section 7 of this Element: (a) "dwelling unit" shall mean and include a house on a single-family detached Lot, a townhouse, a condominium unit, or an apartment unit; and (b) the words "platted" or "platting" or substantially similar wording shall mean the following: (x) with respect to single-family detached Lots and townhouse Lots, the recording of a plat of those Lots in the office of the Register of Deeds for Chatham County, North Carolina; and (y) with respect to condominium units and apartment units, the issuance of a certificate of occupancy for the units; or
- (2) Issuance of a certificate of occupancy for a building that includes the 10,000,000 square foot of non-residential use in Chatham Park for which certificates of occupancy have been issued; or
- (3) A total of ten thousand (10,000) points is reached by adding the points determined in accordance with the following subsection (a) to the points determined in accordance with the following subsection (b)
  - (a) Each dwelling unit platted in Chatham Park is equal to 1.0 point;
- (b) Each square foot of non-residential use in Chatham Park for which a certificate of occupancy is issued is equal to 0.001 point;

As an example of how 10,000 points is reached under the foregoing scoring system, assume that 5,500 dwelling units in Chatham Park have been platted - that equals 5,500 points. Also assume that certificates of occupancy have been issued for 4,500,000 square feet of non-residential uses in Chatham Park - that totals 4,500 points. 5,500 + 4,500 = 10,000.

The proposed Public Works Site shall not be located within a Public Park site. If the proposed Public Works Site is in Chatham Park and is located in portion of Chatham Park for which a Small Area Plan has not been approved, the proposed Public Works Site shall be shown on the applicable Small Area Plan when approved by the Town. The Town shall have a period of sixty (60) days immediately following the date the proposed Public Works Site is identified within which to notify CPI that the Town either confirms or does not confirm reservation of the Public Works Site (the "Confirmation Period"). If, on or before the end of the Confirmation Period, the Town notifies CPI that it confirms reservation of the Public Works Site, the Town

shall have five (5) years following the end of the Confirmation Period to obtain a building permit for construction of initial improvements to the Public Works Site. If the Town obtains the building permit within the five (5) year period, CPI shall convey to the Town or cause the owner of the Public Works Site to convey to the Town, the Public Works Site by special warranty deed, subject to all applicable title exceptions (including, without limitation, ad valorem property taxes for years subsequent to the year in which the Public Works Site is conveyed to the Town and, if the Public Works Site is located in Chatham Park, the Master Plan, Additional Elements, Development Agreement, and applicable Small Area Plan). If the Town does not obtain a building permit for construction of initial improvements to the Public Works Site by the end of the five (5) year period, or if by the end of the Confirmation Period the Town does not notify CPI that it confirms reservation of the Public Works Site, the reservation of the Public Works Site shall terminate as of the end of the five (5) year period or end of the Confirmation Period, as applicable, any Small Area Plan on which the proposed Public Works Site has been shown shall be deemed amended to delete the Public Works Site, the reserved site is released from the reservation, and CPI shall have no further obligation to reserve a Public Works Site for the Town. The special warranty deed by which the Public Works Site is conveyed to the Town may contain provisions restricting use of the site to a public works administrative site (as described herein) or use for other public facilities purposes, or for such other uses approved by the Chatham Park Development Review Committee.

# Section 8. Improvements on Public Facilities Sites.

### **Objective:**

Provide for improvements on public facilities sites that will meet the Master Plan's objectives of delivering communities of exceptional design, character and quality that preserve critical environmental resources and provide open space amenities.

Buildings and other improvements on public facilities sites should be designed to be compatible with the architectural character of the surrounding area. Chatham Park design guidelines applicable to public buildings and other structures shall not unreasonably increase the cost of construction, operation and maintenance of the facility.

### Section 9. Reservations.

### **Objective:**

To reserve sites for public schools and other public facilities reasonably anticipated to be located in Chatham Park and to provide for adequate amounts of sewer capacity, impervious surface, and stormwater capacity for such public schools and other public facilities

#### Sites

The Schools Section of this Element addresses reservation of sites for public schools in Chatham Park. Reservation of sites for other public facilities reasonably anticipated to be located in Chatham Park will be addressed in Small Area Plans. Chatham Park will work with the Town and other providers of public facilities to determine the need for and appropriate locations of such public facilities.

# **Sewer Capacity**

Provision of sewer capacity for public schools in Chatham Park is addressed in the Schools Section of this Element. Provision of sewer capacity for other public facilities reasonably anticipated to be located in Chatham Park will be addressed in applicable Small Area Plans.

### Impervious Surface

The Master Plan authorizes development in Chatham Park under the high density option under Section 5.5.10 of the Town's zoning ordinance. Most of Chatham Park is in areas identified in the Town's zoning ordinance as WSIV-PA areas, and the remainder of Chatham Park is in areas identified in the Town's zoning ordinance as WSIV-CA areas. Built-upon area for non-residential development on sites in WSIV-CA areas may not exceed 24% of the site. Built-upon area for nonresidential development in WSIV-PA areas may not exceed 70% of the site, provided that engineered stormwater controls are utilized to control runoff from the first inch of rainfall. For the purposes of this portion of the Element, "impervious surface" means the same thing as "built-upon area". For purposes of tracking impervious surface in Chatham Park, Small Area Plans and other development plans that locate proposed public schools and other public facilities sites will allocate to such sites impervious surface of 24% for those portions of the site in WSIV-CA areas and impervious surface of 70% for those portions of the site in WSIV-PA. Provided, however, the foregoing allocations for proposed public schools and other public facilities sites shall be reduced to the maximum percentage of impervious surface or built-upon area allowed by applicable federal, State of North Carolina, or local law, ordinance, rule, policy, or permit, or as provided in a binding agreement with a governmental entity.

### Stormwater Capacity

A method for providing adequate stormwater capacity for public schools and other public facilities reasonably anticipated to be located in Chatham Park will be addressed in the Stormwater Additional Element.